XV. *On the classification of the Australian* Pyralidina.

By E. Meyrick, B.A.

[Read April 2nd, 1884.]

The present instalment includes the *Musotimidæ*, *Botydidæ*, and *Scopariadæ*, with some additional species of the two families previously treated. There remain the *Hydrocampidæ* and *Pterophoridæ*, which will form the subject of a third paper; and the *Crambidæ*, *Phycididæ*, and *Galleriadæ*, which have been already described elsewhere. I think that this family subdivision will allow of the development of the group being properly understood. Its essential principle is, as I have explained before, that one family is not bound to be absolutely separated from another simply by the presence or absence of a single character, but by a majority of several distinguishing points; which is the most that can be expected from a system really arranged on natural lines.

It seems to me useless to attempt to judge of the value of characters for classification, without strict reference to the principles of evolution. I think it might be laid down as an axiom, that when an organ has wholly disappeared in a genus other genera which originate as offshoots from this genus cannot regain the organ, although they might develop a substitute for it. Thus in the *Geometrina* we have a number of genera in which the larvæ have wholly lost three pairs of abdominal legs, the character being proved to be very persistent; it must be held that no genera derived from any of these could recover the lost pairs of legs, and therefore the Geometrid genera with 12-legged larvæ must be ancestral types, and not derivative; and for the same reason the *Geometrina* must be regarded as a terminal development, a group which ends in itself and has given rise to no other groups. The character of the absence of ocelli may be applied in the same way. So, in the present group, the *Botydidæ* are specially characterised by the absence of the uncus in the male genitalia; so far, that is, as I have been able to examine. It is therefore certainly probable—since the other families all, as a rule, have the uncus developed—that the *Botydidæ* are also a terminal development. But we need not be surprised if we find in the other families of the group genera where the uncus is also obsolete; because the obsolescence of a character normally present may occur at any time. It is for this reason that single characters are not usually reliable for family separation. Similarly, in neuration, when a vein disappears (which in the higher groups—that is, all except the *Tineina*—never occurs except by coincidence with another vein) it can never reappear in the descendants of the genus; the two coincident veins cannot be separated (although veins which are only partially coincident—*i. e.*, stalked—may be). The *Musotimidæ* are therefore also a terminal group. I do not, however, propose to explain my views of the process of development of the *Pyralidina* until I have finished the remaining families, when they can be stated more completely; I have only indicated as much as is necessary to explain the family limits adopted. I think the principles expressed above may be briefly defined by saying that for systematic purposes negative characters are of more importance than positive.

As mentioned above, I have examined and employed the structure of the genitalia in the male as giving characters of family value in this group. In the absence of information from other sources I do not feel very secure of my results; and I have not attempted here to investigate specific differences, assuming that such exist. Adopting the terminology of Mr. P. H. Gosse in his memoir on the *Papilionidæ*, I recognise the uncus existing in a very similar form; the scaphium I have found occasionally distinct, but usually it appears to be absent; the harpes do not appear to be represented at all. The clasping organs appear to consist of a pair of strong horny valves, which may be either retractile and usually withdrawn within the abdomen, or apparently permanently exserted, only concealed by the anal tuft; and sometimes also of a pair of elongate claspers, which appear to be prolongations of the integument of the abdomen, and are more feeble than the valves; these claspers are not usually well-developed and often entirely absent, but when present the valves are apparently modified and reduced; I have not been able always to satisfy myself of this structure, in the absence of fresh specimens, through my inexperience of these organs.

I have thought it necessary in these families to give the characters of all the genera in full, as I have attempted a more minute classification than that of Lederer: I conceive that it is absolutely necessary, for the understanding of the group, to subdivide the genus *Botys* as adopted by him, and, although I make no claim of finality, I think the differences in the structure of the legs and maxillary palpi which I have utilised will be found to indicate natural groups, and such as are capable of scientific definition.

The geographical distribution of many species of *Botydidæ* is amazingly wide; very many of the Australian species range through the Malay Archipelago, Southern Asia,.and Africa down to the Cape of Good Hope. The cause of this wide distribution, which is not found in other groups, is at present not intelligible to me, and more accurate and general information must be awaited. I will only indicate here the very limited nature of the indigenous Australian Botydid fauna, consisting principally of genera allied to *Eurycreon*, Ld., which thus appears to be an older type than the true *Botys*. All the more highly developed genera, especially the group with long antennæ, are only represented by species of Malayan or wider range. The New Zealand indigenous fauna of *Botydidæ* is extremely small, some half-dozen species, apparently of South American affinity; and it possesses also a few species of wide range, which have made their way thither from Australia or the Pacific Islands. On the other hand, the New Zealand *Scopariadæ* are greatly developed, and the genus *Scoparia* is the largest lepidopterous genus in New Zealand, where I have no doubt that there are over 100 endemic species; it is also well represented, but much less conspicuous in Australia. That these facts are of geographical rather than of climatic importance I have no doubt.

The identifications of Walker's and Butler's species have been made from the types; in the case of other authors, when the identification has been verified by other means in addition to their works, I have mentioned it.

EPIPASCHIADÆ.

I have only examined the genitalia of *Catamola*, which seem not to differ from the normal type of the *Pyralididæ*. I have seen species of this family from China and Japan.

CATAMOLA, *Meyr.*

Valves of male exserted, densely scaled; uncus well developed. In the following additional species the antennal process is erect instead of recurved, but all other characters agree.

Catamola elassota, n. s.

♂, 14 mm. Head, palpi, and thorax pale greyish ochreous, coarsely mixed with dark fuscous, Antennæ grey, basal process moderate, erect. Abdomen pale ochreous. Legs dark fuscous, posterior tibiæ whitish above, apex of all tarsal joints white. Fore wings moderate, triangular, costa slightly arched, apex rounded, hind margin rather obliquely rounded; pale greyish ochreous, mixed with grey, and irrorated with blackish; a tolerably straight thick black line from one-third of costa to two-fifths of inner margin, irregularly interrupted in disc; a similar line from slightly beyond middle of costa to two-thirds of inner margin, forming a right angle in middle, its inner edge emitting an ill-defined linear tooth inwards at one-third from inner margin; a small black discal spot; a row of ill-defined subquadrate black spots on hind margin; cilia ochreous-whitish with two grey lines, basal third spotted with grey. Hind wings grey, hind margin rather darker; cilia grey-whitish, with two indistinct grey lines.

Distinguished from all the rest of the genus by its small size, the exact position of the antennal process, and the different costal origin of the second line. Nearest to *C. thyridalis*.

Quorn, South Australia, in October; one specimen.

PYRALIDIDÆ.

To the definition of this family should be added: vein 10 of fore wings separate from 9. Valves of male exserted, clothed with scales, sometimes modified; claspers sometimes developed; uncus generally well developed,

Six additional species are given.

BALANOTIS, *Meyr.*

Valves of male strong; uncus moderately long.

Balanotis hercophora, n. s.

♀, 25 mm. Head and palpi ochreous-yellow. Antennæ grey. Thorax ochreous-yellow; a ring before anterior margin, a large central spot, a small lateral spot, and another at extremity of patagia, dark fuscous. Abdomen whitish ochreous, partially suffused with yellow, with a large irregular dark fuscous spot on side of each segment. Anterior legs dark fuscous (others broken). Fore wings moderate, triangular, costa slightly arched, apex rounded, hind margin rather obliquely rounded; yellowish white, veins and margins of dark markings yellow, markings dark fuscous; a spot on base of costa; four transverse fasciæ; first straight, moderately broad, near base; second straight, from one-third of costa to two-fifths of inner margin, outer edge with a short projection above middle; third from two-thirds of costa to two-thirds of inner margin, irregular-edged, rather strongly curved outwards in middle, rather sinuate beneath, united with second by a rather broad streak along costa, and another along inner margin; fourth hind marginal, inner edge irregular; a transverse-elongate black discal spot, almost touching costal border; cilia dark fuscous (imperfect). Hind wings yellow-whitish, suffused with yellow towards costa and inner margin; a small cloudy fuscous spot in disc before and below middle; a dark fuscous fascia at two-thirds, and another along hind margin, both as in fore wings, but former not reaching inner margin; cilia as in fore wings.

A conspicuously distinct species, allied to *B. didymalis*, with which it entirely agrees in structure (unless the male presents differences) except that vein 6 of the fore wings also rises out of 9 near base, whilst in *B. didymalis* 6 and 9 rise from a point; not improbably this difference may not persist in the male.

Port Darwin, North Australia; one specimen.

Balanotis didymalis, Walk.

I have been enabled to examine the male; the fore wings have no glandular swelling beneath the costa; the antennæ are evenly ciliated (½). I do not think these differences need involve generic separation. The genus cannot be confused with any other structurally except

Stemmatophora, from which it is separated by the quite different palpi.

STEMMATOPHORA, *Gn.*

Valves of male strong; uncus stout, strongly curved.

Stemmatophora vibicalis, Ld.

I have little doubt that *Paredra eogenalis*, Snell., Midd. Sum., 60, Tijd. v. Ent., 1883, pl. vi., 1, is a synonym of this; Snellen separated his species generically from *Stemmatophora* on the ground of certain differences in the palpi and antennæ, which (if the identification is correct) I am disposed to think in this instance insufficient. Snellen received his specimens from Celebes.

AGLOSSA, *Latr.*

Valves of male strong; uncus stout, gently curved. In *A. cuprealis* the uncus is furnished with a short process beneath its apex, bearing a sharp horny upwards-bent terminal hook.

ASOPIA, *Tr.*

Asopia gerontialis, Walk.

Pyralis gerontesalis, Walk., 896; *P. despectalis*, ib., Suppl., 1243; *P. miseralis*, ib., Suppl., 1244; *P. achatina*, Butl., E. M. M., xiv., 49.

Very similar in appearance to *A. farinalis*, but readily separated by its grey colouring.

I have not myself received this species, but specimens from Eastern Australia are in the British Museum; also from Ceylon, Java, Celebes, the Hawaiian Islands, and West Africa.

Asopia caustica, n. s.

♂, 15 mm. Head, palpi, and antennæ ochreous, face paler Thorax ochreous, mixed with fuscous. Abdomen whitish ochreous, mixed with fuscous. Legs whitish ochreous, anterior pair suffused with dark fuscous. Fore wings moderate, triangular, costa faintly sinuate, apex obtuse, hind margin rounded, rather strongly oblique; whitish ochreous, mixed with brownish ochreous; a pale line from one-fourth of costa to two-fifths of inner margin, thrice sinuate outwards, most strongly in middle, posteriorly margined by a dark fuscous streak; basal area suffused with reddish fuscous, becoming dark fuscous on margins; a second pale line, dilated on costa, from two-thirds of costa to four-fifths of inner margin, gently outwards-curved, obscurely toothed at one-fourth and three-fourths, indistinctly margined with fuscous, which forms small cloudy spots on inner edge opposite teeth; costa between first and second lines dark fuscous, marked with three pale dots; a conspicuous subquadrate blackish discal spot; a cloudy dark fuscous spot on costa immediately after second line, shading posteriorly into reddish fuscous; cilia pale whitish ochreous, slightly mixed with reddish fuscous. Hind wings pale greyish ochreous; an obscure irregular dentate grey line beyond middle; cilia as in fore wings.

Appears allied to *A. torridalis*, Ld., and *A. fuscicostalis*, Snell. (which are apparently very similar to each other, though I have not seen either), but the first line is quite different, being very much more divergent on the costa from the second than in either of these as figured.

Duaringa, Queensland; one specimen received from Mr. G. Barnard. I think it improbable that this species is confined to Australia, but cannot identify it with any other description.

ENDOTRICHA, *Z.*

Claspers apparently developed. In *E. pyrosalis* the claspers appear to be large and tufted, the valves reduced to a long spinous process lying beneath the clasper, the uncus well developed; on apex of abdomen above origin of uncus is a raised rounded protuberance.

PERSICOPTERA, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ moderate, in male apparently very strongly ciliated. Labial palpi moderate, arched, ascending, 2nd joint with dense rough projecting scales beneath, terminal joint short, exposed, filiform. Maxillary palpi very short, filiform. Fore wings with vein 3 remote from 4, 4 and 5 very near together from angle, 6 from a point with 9, 7 and 8 stalked out of 9, 10 separate, 11 from near 10, anastomosing shortly with 12. Hind wings as broad as fore wings; 3 remote from 4, 4 and 5 tolerably approximated from angle, 7 out of 6 rather near origin, anastomosing with 8 moderately.

Differs from all other described Pyralid genera, except *Semnia*, Hb., and *Eurypta*, Ld., by the anastomosing for a short space of veins 11 and 12 of the fore wings.

Lederer forms a separate family (*Semniidæ*) for their reception solely on this ground, as well as one (*Homalochroidæ*) for the genus *Homalochroa*, Ld., in which these veins anastomose, but do not separate again, merely an extreme case of the same structure. He describes one vein as cutting through the other, which is essentially erroneous. The second of these families is certainly untenable; and I see no reason at present for separating any of these genera from the *Pyralididæ* as defined. *Persicoptera* differs from *Semnia* and *Eurypta* in that veins 8 and 9 rise separately out of 7, not on a common stalk, in the presence of distinct maxillary palpi, in the basal joint of the antennæ not being elongate, and other characters.

Persicoptera pulchrinalis, Gn.

Endotricha pulchrinalis, Gn., 220, pl. iii., 7; *Scopula gavisalis*, Walk., Suppl., 1475.

A striking species, somewhat variable in the breadth of the first white fascia.

Sydney, New South Wales; Mount Lofty range, South Australia; and from Tasmania: in September. I have seen, but have not been enabled to examine, the male; it does not appear to present any singular characters.

DIPLOPSEUSTIS, n. g.

Forehead flat, vertical. Ocelli present, concealed. Tongue well developed. Antennæ moderate, in male tolerably filiform, evenly ciliated ($\frac{1}{2}$), rough-scaled above. Labial palpi moderate or rather long, 2nd joint straight, porrected, with dense tolerably short projecting scales, somewhat thickest in middle, forming a short apical tuft beneath; terminal joint moderate, slender, filiform or loosely scaled in middle, obliquely ascending. Maxillary palpi moderate, strongly dilated with dense scales towards apex, obliquely truncate. Abdomen rather long, in male with moderate anal tuft; valves apparently strong, exserted. Fore wings with veins 4 and 5 stalked, 8 and 9 stalked out of 7. Hind wings broader by one-fourth than fore wings; 4 and 5 stalked, 7 out of 6 near origin, anastomosing moderately with 8.

Differs from all the other genera of the family known to me in the form of the maxillary palpi, which recall those of *Crambus* and *Scoparia*. In superficial appearance the species (especially the second) strongly resemble

Pseudochoreutes, Snell., but structurally they differ considerably from it. The two species described are readily separated by the difference in the length of the labial palpi, as well as in marking.

Diplopseustis minima, Butl.

Cymoriza minima, Butl., Proc. Zool. Soc., 1880, 684.

♂, ♀, 13—16 mm. Head white, crown ochreous-tinged. Labial palpi two and a half times as long as head, dark fuscous, internally white, terminal joint black, tip white. Maxillary palpi white, basal half dark fuscous. Antennæ whitish, spotted with grey on back. Thorax pale greyish ochreous, more whitish posteriorly. Abdomen whitish, segments with a posterior fuscous suffusion, two penultimate segments wholly fuscous. Anterior legs dark fuscous; middle and posterior legs white, spurs banded with dark fuscous. Fore wings elongate-triangular, narrow, costa gently arched, apex rounded, hind margin oblique, irregular, with a rather deep sinuous indentation above middle and an obtuse bidentate median projection; ochreous-white, mixed with pale ochreous and thinly irrorated with dark fuscous; veins ochreous-brown; costa ochreous-brown, marked with several irregularly placed small ochreous-white blackish-margined spots; an almost obsolete irregularly dentate pale transverse line at one-third, lower half suffusedly margined posteriorly with dark fuscous; a small black discal dot; a pale line from three-fourths of costa to four-fifths of inner margin, suffusedly margined anteriorly with dark fuscous, especially towards inner margin, sinuate-curved outwards above middle; hind marginal area somewhat suffused with ochreous-brown; a small double black spot on hind margin in indentation, and two or three others smaller towards anal angle; cilia with basal half ochreous-white, apical half white, divided by a sharply marked dark fuscous line; costal cilia ochreous-white with three subquadrate blackish spots. Hind wings irregularly indented below apex and sinuate below middle; grey-whitish, towards apex greyer; a very indistinct pale sinuate line towards hind margin; a cloudy triangular blackish spot on hind margin below middle, its apex cut by the pale line; cilia as in fore wings.

Var. *α*, 16—20 mm. More or less wholly suffused with fuscous, but markings distinct.

Christchurch and Wanganui, New Zealand; Melbourne, Victoria; Sydney, New South Wales; in February and March, not uncommon, frequenting rushes in damp places, and also taken at light. The form described here as typical is the New Zealand one; the larger and darker var. α is that found in Australia; but there can be no question of their specific identity. The aspect of the species is singular and recalls that of some *Crambidæ*. Butler's type is a small, dark, sharply marked specimen, from Formosa.

Diplopseustis hemiophthalma, n. s.

♂, 12 mm. Head and palpi whitish ochreous; labial palpi one and a half times as long as head, externally suffused with dark fuscous, except at apex of terminal joint. Antennæ whitish ochreous, above spotted with dark fuscous. Thorax whitish ochreous, with a few dark fuscous scales. Abdomen whitish, irrorated with dark fuscous. Anterior legs dark grey; middle and posterior legs whitish, tarsi banded with grey. Fore wings elongate-triangular, rather narrow, costa gently arched, apex rounded, hind margin sinuate above and below middle, oblique; ochreous-white, mixed with pale ochreous, and irregularly irrorated with fuscous and grey; costa suffused with dark fuscous; a pale line from one-third of costa to one-third of inner margin, suffusedly margined posteriorly with dark fuscous, curved outwards in middle, and again less strongly beneath costa; a round blackish discal spot; costa marked at one-half, five-eighths, and three-fourths with three semicircular dark-centred pale spots; a pale line from four-fifths of costa to four-fifths of inner margin, suffusedly margined with dark fuscous, more strongly anteriorly, slightly angulated above middle; a row of small obscure blackish spots along hind margin, tending to be confluent in upper sinuation; cilia with basal third ochreous-white, bounded by a dark fuscous line, remainder white, with a faint greyish line; costal cilia imperfect. Hind wings indented above middle; white, irrorated with grey; a round black discal spot, surrounded by a white patch; a white line parallel to hind margin at two-thirds, partially margined with dark fuscous; a row of small obscure dark fuscous spots along hind margin, a larger one in indentation; cilia as in fore wings.

Although superficially like *Pseudochoreutes*, the lines are quite differently placed to those in the described species.

Sydney, New South Wales; one specimen in March.

MUSOTIMIDÆ.

Fore wings with vein 10 absent, 8 and 9 stalked, sometimes also 7 out of 8. Hind wings with vein 6 from upper angle of cell, 7 from upper margin of cell before angle, anastomosing with 8. Abdomen in male with uncus strongly developed, complex.

Distinguished from all neighbouring families by the peculiar origin of vein 7 of the hind wings. The absence of vein 10 of the fore wings is also a remarkable point, but I hardly expect this to be essential. The development of the genitalia of the male in these two genera is more complex than in any others yet examined. The two genera are immediately separated by the structure of the palpi and the difference in neuration.

TRICHOPHYSETIS, n. g.

Forehead with a short conical scaly projection. Ocelli absent. Tongue well developed. Antennæ moderate, in male stout, filiform, clothed with moderate pubescence, with whorls of stiff scales at joints, except towards base. Labial palpi moderate, tolerably straight, porrected, clothed with very long fine dense hairs capable of depression and expansion, terminal joint concealed. Maxillary palpi long, terminating in a long expansible pencil of loose very fine hairs. Posterior tibiæ short, spurs all long and equal. Abdomen moderate, in male with moderate anal tuft; uncus broad and thick at base, forming a long slender downwards-bent hook, the apex of which touches that of a straight slenderer process from beneath thick basal part, so as to form a large triangular loop; claspers moderately long, very slender; valves exserted, reduced each to a pair of very fine acute processes projecting above and below claspers, somewhat incurved. Fore wings with veins 7 and 8 stalked out of 9, 10 absent. Hind wings with veins 3 and 4 from point of angle, 5 tolerably approximated at base, 6 from upper angle, 7 from a bend in upper margin of cell shortly before angle, anastomosing with 8 immediately from origin to middle. Lower median of hind wings not pectinated.

Perhaps the expansible tufts of the palpi may not occur in the female, which is not known to me. A very curious and interesting genus.

Trichophysetis neophyla, n. s.

♂, 14—15 mm. Head, thorax, and maxillary palpi white. Labial palpi externally ochreous-yellow, base and apex dark fuscous, internally white. Antennæ pale whitish ochreous. Abdomen white, somewhat mixed with pale ochreous, irrorated with dark fuscous opposite lines of hind wings. Legs white, anterior tibiæ dark fuscous. Fore wings moderate, triangular, costa gently arched, apex rounded-rectangular, hind margin not oblique, sinuate below apex, rounded beneath; snow-white, sometimes wholly suffused with light ochreous; median space generally ochreous-brown, except on costa; a faint ochreous-brown line near base; a double slightly-curved fuscous line from one-third of costa to one-third of inner margin; a double fuscous line from two-thirds of costa to three-fourths of inner margin, strongly curved outwards, somewhat sinuate inwards towards inner margin; a transversely elongate white discal spot; beneath this in one specimen a large oval black spot; sometimes a fuscous suffusion towards costa before apex, and anal angle; a blackish inwardly sinuate line near hind margin, extending from costa to middle, leaving a narrow yellow-ochreous hind marginal streak; cilia white, with a dark fuscous line. Hind wings white, partly mixed and sometimes almost wholly suffused with ochreous; a double slightly curved dark fuscous line at one-third, and another at two-thirds, becoming obsolete towards costa; a very slender brownish ochreous hind marginal streak, anteriorly obscurely edged with dark fuscous; cilia as in fore wings.

Certainly very variable, perhaps exceeding the limits of this description. The neuration of the fore wings is that of the *Pyralididæ*; the character of the hind marginal streak clearly indicates affinity with the Hydrocampid genera.

Rosewood, Queensland, in September; Sydney, New South Wales, in November; three specimens in thick bush.

MUSOTIMA, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ moderate, in male stout, dentate, evenly ciliated ($\frac{1}{2}$), back rough-scaled. Labial palpi moderately long, porrected or ascending, 2nd joint with evenly projecting scales beneath, terminal joint moderately exposed, ascending, slender, with rough scales beneath towards apex. Maxillary palpi moderate, dilated with rough scales, truncate. Posterior tibiæ with spurs almost equal. Thorax in male beneath with a curved pencil of hairs on each side behind anterior legs, projecting laterally. Abdomen moderate, in male with moderate anal tuft; uncus forming a long slender downwards-bent hook, which meets at apex a similar less curved process from beneath its base; from between these at base rises a rather thicker straight blunt process, variable in length (short in *aduncalis*, in *nitidalis* nearly reaching apex of others); scaphium distinct, sometimes with a horny double spine; valves broad, exserted. Fore wings with 8 and 9 stalked, 10 absent, 11 short. Hind wings somewhat broader than fore wings; 3, 4, 5 remote; 6 from angle, 7 from considerably before angle, anastomosing with 8 from very near origin to one-third; transverse vein very faint. Lower median of hind wings not pectinated.

The species are neatly and elegantly marked. Besides the four given below I am only acquainted with one other, *Isopteryx acclaralis*, Walk., 403; it is represented by a single type in the British Museum, of which I cannot investigate the structure, but evidently referable here, and closely allied to *M. nitidalis*, from which it may be easiest distinguished by the first line forming a conspicuous round white spot on fold, and by the white discal lunule being notably nearer base; the locality is given as Ceylon. The larvæ probably all feed on ferns.

A. Fore wings with upper half of second line curved outwards .. .. *aduncalis.*
B. Fore wings with upper half of second line curved inwards or straight.
  1. White discal spot divided into two small round dots .. .. *nitidalis.*
  2. White discal spot single, transverse.
    a. Second line of fore wings forming an acute angle below middle .. .. *ochropteralis.*
    b. Second line of fore wings obtusely bent in middle .. .. *acrias.*

Musotima aduncalis, Feld.

Diathrausta aduncalis, Feld., Reis. Nov., cxxxv., 11.

Variable in colour from white to ochreous-yellow.

Auckland, New Zealand; three specimens in January.

Musotima acrias, n. s.

♂, ♀, 17—18 mm. Head and thorax whitish ochreous, suffused with reddish ochreous. Palpi pale whitish ochreous, base and apex of 2nd joint reddish ochreous. Antennæ whitish ochreous. Abdomen whitish, mixed with ochreous. Legs ochreous-whitish, tibiæ irrorated with ochreous-fuscous. Fore wings moderate, triangular, in female more elongate, costa slightly arched, apex tolerably rectangular, hind margin somewhat oblique, waved, sinuate below costa so as to project obtusely in middle, rounded beneath; whitish ochreous, mixed and suffused with reddish ochreous, with some scattered fuscous scales; a very small blackish spot on inner margin near base, and another in disc obliquely beyond it, both followed by small obscure white spots; a row of four similar spots, preceded by small white spots, crossing wing from two-fifths of costa to two-fifths of inner margin, third spot from costa largest but not conspicuous; a conspicuous white 8-shaped discal spot, margined with blackish; a small obscure white spot on middle of inner margin, and another between this and discal spot, both preceded by dark fuscous scales; a small dark fuscous mark on costa above discal spot; an indistinct interrupted dark fuscous line from two-thirds of costa to disc at three-fourths, margined posteriorly by several small white spots, only distinct on costa, becoming obsolete below middle; a cloudy dark fuscous line from apex near and parallel to hind margin throughout, slightly margined with white posteriorly; cilia white, with a dark grey basal line broadly interrupted below middle, and dark grey spots at apex, middle, and anal angle. Hind wings sinuate below apex; white, partly mixed with ochreous in disc; a straight dark fuscous line at one-third from middle to inner margin; an irregular dark fuscous discal spot, connected with inner margin by a thick curved dark fuscous line, from apex of which proceeds a strongly outwards curved line of obscure fuscous lunules to costa; a broad pale ochreous hind marginal band, cut near hind margin by an irregular dark fuscous line preceded by lunulate white spots; cilia white, with an interrupted grey line near base.

Nearly allied to *M. nitidalis*, but white markings much less developed; discal white spot not separated into two dots.

Blackheath (3500 feet), New South Wales, in March; Deloraine, Tasmania, in November; two specimens.

Musotima nitidalis, Walk.

Isopteryx nitidalis, Walk., Suppl., 1417; *Diathrausta timaralis*, Feld., cxxxv., 23.

Varies principally in depth of colouring, New Zealand specimens being usually darker and more sharply marked than Australian, and slightly smaller.

Larva feeds on *Adiantum* (perhaps also on other ferns), sometimes doing much damage in greenhouse plants.

Sydney, New South Wales; Fernshaw, Victoria; Cambridge, Taranaki, Otira River, Invercargill, New Zealand; common from October to May.

Musotima ochropteralis, Gn.

Isopteryx ochropteralis, Gn., 230.

Varies very little.

Sydney, New South Wales; Fernshaw, Victoria; Launceston, Tasmania; Mount Lofty range, South Australia; in October, November, January, and March, tolerably common.

Fam. ?.

The following genus cannot, I think, be included in any of the families here given, on account of the essentially different neuration of the hind wings; but I am not prepared to say whether it may not be classed with the *Pterophoridæ*; the point will be discussed hereafter.

TINEODES, *Gn.*

Forehead flat, vertical. Ocelli present. Tongue very long and slender. Antennæ as long as fore wings (according to Guenée not ciliated). Labial palpi very long, roughly scaled above and beneath, gradually attenuated, straight, porrected, terminal joint short, concealed. Maxillary palpi moderately long, considerably dilated with loose scales. Legs very long and slender; posterior tibiæ (in female) with outer spurs two-thirds of inner. Abdomen elongate, slender, more than twice the breadth of the hind wings, ovipositor rather long, filiform. Fore wings with 8 and 9 stalked, 11 from middle of cell, long. Hind wings as broad as fore wings; 3 and 4 remote; 5 and 6 from transverse vein, rather nearer together than to 4 or 7; 7 from angle of cell, only touching 8 at about one-fifth.

I have not seen a male. The neuration of the hind wings is of a primitive type, as compared with ordinary Pyralids.

Tineodes adactylalis, Gn.

Tineodes adactylalis, Gn., 237, pl. ix., 7; *Carcantia pterophoralis*, Walk., 425.

Sydney, New South Wales; one specimen. Walker's specimen is also Australian; Guenée suggests Africa as the locality of his type, but only conjecturally, and there is at present no reason to suppose that the species occurs outside Australia.

BOTYDIDÆ.

Fore wings with veins 8 and 9 stalked, 7 separate, 10 separate, or rarely stalked with 9 or 11. Hind wings with vein 6 from upper angle of cell, 7 stalked or from same point with 6, anastomosing with 8 or rarely free; lower median naked, or rarely with tolerably defined pectination towards base. Abdomen in male with valves exserted or retracted; no claspers; uncus obsolete.

The following is a tabulation of the genera given:—

1 *a*. Antennæ at least as long as fore wings.
2 *a*. Anterior tibiæ of male with long dense hairs beneath.
3 *a*. Antennæ in male simple .. .. *Phalangiodes.*
3 *b*. ,, ,, strongly ciliated .. .. *Rhimphalea.*
2 *b*. ,, ,, not hairy .. .. .. *Euclasta.*
1 *b*. Antennæ shorter than fore wings.
2 *a*. Terminal joint of palpi triangularly scaled.
3 *a*. Patagia in male terminating in a long tuft .. *Pelecyntis.*
3 *b*. ,, normal.
4 *a*. Antennæ in male ciliated with tufts (2) .. .. *Tetracona.*
4 *b*. ,, ,, evenly ciliated (¼) .. .. *Hellula.*
2 *b*. ,, ,, not triangularly dilated.
3 *a*. Antennæ in male bent above middle, with tuft of scales.
4 *a*. Antennæ in male with a tuft of scales on back of bend .. .. *Semioceros.*
4 *b*. Antennæ in male with a streak of scales in bend beneath .. .. *Proternia.*
3 *b*. Antennæ in male not bent or tufted.
4 *a*. Antennæ in male excavated above base, with an erect projection of scales.
5 *a*. Palpi porrected, triangularly scaled .. .. *Pachyarches.*
5 *b*. Palpi curved, ascending, terminal joint slender, erect .. .. *Zinckenia.*
4 *b*. Palpi curved, not excavated or with basal projection.
5 *a*. Forehead with distinct horny projection.
6 *a*. Tongue obsolete .. .. *Sedenia.*
6 *b*. ,, well developed.
7 *a*. Spurs of posterior tibiæ unusually short .. .. *Sceliodes.*
7 *b*. ,, ,, ,, normal.
8 *a*. Hind wings broader by one-half than fore wings *Tritæa.*
8 *b*. ,, about as broad as fore wings.
9 *a*. Anal valves exserted.
10 *a*. Antennæ in male strongly ciliated (1½) .. .. *Proteræca.*
10 *b*. ,, ,, moderately ciliated (½—¾) .. *Eurycreon.*
9 *b*. ,, ,, retracted.

10 *a*. Veins 3 and 4 of hind wings remote .. .. *Criophthona.*
10 *b*. Veins 3 and 4 of hind wings tolerably approximated .. .. *Metallarcha.*
5 *b*. Veins flat or rounded.
6 *a*. Ocelli absent .. .. *Cirrhochrista.*
6 *b*. ,, present.
7 *a*. Maxillary palpi with fine terminal pencil .. *Glyphodes.*
7 *b*. ,, ,, not penicillate.
8 *a*. Abdomen in male with expansible spherical anal tuft .. .. *Phacellura.*
8 *b*. Abdomen in male without expansible tuft.
9 *a*. Posterior tibiæ in male with outer middle-spur obsolete.
10 *a*. Posterior tibiæ in male with outer end-spur rudimentary .. .. *Atelocentra.*
10 *b*. Posterior tibiæ in male with outer end-spur well developed .. .. *Scopula.*
9 *b*. Posterior tibiæ in male with outer end-spur well developed.
10 *a*. Antennæ more than three-fourths of fore wings.
11 *a*. Maxillary palpi filiform .. .. *Siriocauta.*
11 *b*. ,, ,, terminally dilated, truncate .. *Margarodes.*
10 *b*. ,, not more than three-fourths of fore wings.
11 *a*. Veins 7 and 8 of hind wings anastomosing almost to extremity.
12 *a*. Veins 10 and 11 of fore wings stalked .. .. *Cnaphalocrocis.*
12 *b*. ,, ,, ,, separate .. .. *Dolichosticha.*
11 *b*. ,, ,, ,, hardly beyond middle.
12 *a*. Antennæ of male with median sinuation.
13 *a*. Posterior tibiæ in male with end-spurs absent .. *Samcodes.*
13 *b*. ,, ,, ,, present .. *Pessocosma.*
12 *b*. ,, without sinuation.
13 *a*. Lower median vein of hind wings with loose basal pectination .. .. *Mnesictena.*
13 *b*. Lower median vein of hind wings naked.
14 *a*. Labial palpi arched, ascending.
15 *a*. Maxillary palpi broadly dilated towards apex .. *Molybdantha.*
15 *b*. ,, ,, filiform.
16 *a*. Patagia in male broadly elongated .. .. *Pachyzancla.*
16 *b*. ,, ,, normal.
17 *a*. Terminal joint of labial palpi cylindrical, truncate.
18 *a*. Forehead flatly rounded. .. .. *Notarcha.*
18 *b*. ,, obtusely but not distinctly projecting .. *Deuterarcha.*
17 *b*. ,, ,, ,, pointed.
18 *a*. Terminal joint of palpi slender, needle-shaped .. *Conchylodes.*
18 *b*. ,, ,, ,, conical .. .. .. *Conogethes.*
14 *b*. ,, ,, straight, porrected.
15 *a*. Middle tibiæ in male dilated, grooved, often containing a tuft .. .. *Mecyna.*
15 *b*. Middle tibiæ in male not grooved.

16*a*. Antennæ in male naked .. .. *Aphytoceros.*
16*b*. ,, ,, ciliated.
17*a*. Veins 4 and 5 of hind wings stalked .. .. *Godara.*
17*b*. ,, ,, ,, separate.
18*a*. Terminal joint of palpi exposed .. .. .. *Nesarcha.*
18*b*. ,, ,, ,, tolerably concealed.
19*a*. Hind wings twice as broad as fore wings .. *Nomophila.*
19*b*. ,, not more than one-fourth broader than fore wings.
20*a*. Forehead flat, very oblique .. .. .. *Bœotarcha.*
20*b*. ,, more or less rounded or vertical.
21*a*. Maxillary palpi filiform .. .. *Botys.*
21*b*. ,, ,, dilated terminally with loose scales.
22*a*. Posterior tibiæ of male with middle-spurs almost equal .. .. *Diasemia.*
22*b*. Posterior tibiæ of male with outer middle-spur one-fourth of inner .. .. *Myriostephes.*

PHALANGIODES, *Gn.*

Forehead rounded, somewhat projecting. Ocelli present. Tongue well developed. Antennæ as long as fore wings, in male slender, filiform, simple. Labial palpi rather short, somewhat ascending, with long dense projecting scales beneath, terminal joint concealed. Maxillary palpi very short, rather thick, filiform. Legs very long; anterior tibiæ and three basal joints of tarsi in male clothed with long fine dense hairs, especially on inner side; middle tibiæ in male somewhat expanded in middle, containing a tuft of long fine hairs enclosed in a groove; posterior tibiæ with outer middle-spur one-half, outer end-spur three-fourths of inner. (Abdomen broken). Fore wings with veins 2 and 3 short-stalked from angle, 4 and 5 from transverse vein, which is angulated at origin of 4; 7 from a point with 8; 10 closely approximated to 8, 11 remote, very oblique. Hind wings broader than fore wings; 2, 3, 4, 5 all tolerably closely approximated at base; 2 straight, 3 strongly sinuate towards base, so as to enclose with 4 an elongate-oval posteriorly acute transparent space; 4 from angle, 4 and 5 somewhat sinuate towards base; 7 out of 6 near origin, anastomosing with 8 to two-fifths, 6 bent beyond origin of 7.

I have not been able to examine a female, which is without many of the above abnormal peculiarities; nor the genitalia of the male. Lederer's statement of the neuration is erroneous, as already indicated by Snellen.

Phalangiodes neptis, Cr.

Phalæna neptis, Cr., 264, F.; *Phalangiodes neptisalis*, Gn., 279.

Brisbane, Queensland; one specimen received from Mr. W. H. Miskin; the British Museum has also Australian specimens. Occurs also in Ceylon, India, and South America.

LEPYRODES, *Gn.*

Not having my specimens at hand I cannot give the full characters at present. The antennæ are as long as the fore wings; the maxillary palpi are stated by Guenée to be absent, but this is probably erroneous, as in many other cases.

Nearly allied to *Phalangiodes*, but without its abnormal structures.

Lepyrodes geometralis, Gn.

Lepyrodes geometralis, Gn., 278, pl. viii., 6.

Duaringa, Queensland; received from Mr. G. Barnard. Occurs also in Java, China, Ceylon, and Mauritius.

EUCLASTA, *Ld.*

I have not obtained the Australian species, and can add nothing to the characters given by Lederer. The antennæ are here markedly longer than the fore wings.

Euclasta maceratalis, Ld.

Euclasta maceratalis, Ld., 481, pl. xv., 11.

Eastern Australia. Besides Lederer's described types there are specimens (unnamed) in the British Museum. The species is certainly very close to *E. splendidalis*, H.-S.

PACHYARCHES, *Ld.*

Forehead flat, oblique. Ocelli present. Tongue well developed. Antennæ more than three-fourths of fore wings, in male stout towards base, filiform, evenly ciliated ($\frac{1}{4}$—$\frac{1}{3}$), sharply excavated above basal joint, basal joint stout, with a strong erect projection of scales in front of excavation. Labial palpi rather long, straight, porrected, triangularly scaled, terminal joint lying in scales of second. Maxillary palpi rather short, dilated with dense scales towards apex, truncate. Posterior tibiæ with outer spurs in male one-third of inner. Abdomen elongate, in male with dense anal tuft of long hair-scales; valves retracted. Fore wings with vein 11 very long and oblique. Hind wings somewhat broader than fore wings; 3, 4, 5 tolerably approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-third. Costa of fore wings beneath with a fold of scales towards middle, concealing a pencil of long hairs.

Pachyarches psittacalis, Hb.

Parotis psittacalis, Hb., Zut., 523, 524; *Margarodes psittacalis*, Gn., 308.

Port Darwin, North Australia; one male. Also occurs in Celebes, China, India, and Ceylon.

MARGARODES, *Gn.*

Forehead somewhat ridged, oblique. Ocelli present. Tongue well developed. Antennæ more than three-fourths of fore wings, in male filiform, evenly ciliated (¼). Labial palpi moderate, porrected, broadly dilated beneath with dense projecting scales, anteriorly truncate, terminal joint concealed. Maxillary palpi rather short, dilated towards apex with dense scales, truncate. Posterior tibiæ in male with outer middle-spur one-fourth of very long inner, outer end-spur one-third of inner. Abdomen elongate, in male with dense anal tuft of hairs; valves retracted. Fore wings with vein 11 very long and oblique. Hind wings slightly broader than fore wings; 3, 4, 5 tolerably approximated at base, 7 out of 6 rather near origin, anastomosing with 8 to one-third. Hind wings beneath with a dense clothing of hairs along vein 1*b*, stronger and almost forming a tuft posteriorly, but ceasing before extremity.

Margarodes vertumnalis, Gn.

Margarodes vertumnalis, Gn., 309; *Margaronia atlitalis*, Walk., 533.

Duaringa, Queensland; Sydney, New South Wales, in March; two males. Also occurs in the Philippines, Celebes, Borneo, and India.

CIRRHOCHRISTA, *Ld.*

I have not been able to obtain specimens for examination, and can add nothing to Lederer's characters.

Cirrhochrista brizonalis, Walk.

Margaronia brizonalis (*brizoalis*), Walk., 976 ; *Cirrhochrista ætherialis*, Ld., pl. xviii., 9.

Eastern Australia ; also from Amboina and China.

PHACELLURA, *Lnsd. Gld.*

Forehead flat, oblique. Ocelli present. Tongue well developed. Antennæ more than five-sixths of fore wings, in male slender, filiform, evenly ciliated (⅓). Labial palpi moderate, somewhat ascending, 2nd joint strongly dilated beneath with projecting scales, rounded in front, terminal joint concealed. Maxillary palpi moderate, anteriorly dilated with dense scales. Posterior tibiæ in male with outer spurs less than half inner. Abdomen elongate, in male with large spherically expansible double anal tuft of long flattened scales ; valves retracted. Fore wings with vein 11 long, oblique. Hind wings rather broader than fore wings ; 3, 4, 5 very closely approximated at base ; 7 out of 6 near origin, anastomosing with 8 to one-third.

Lederer correctly writes *Phacellura* for *Phakellura*, the latter form being classically inadmissible.

Phacellura indica, Saund.

Eudioptis indica, Saund., Zool., ix., 3070 ; Trans. Ent. Soc. Lond., n. s., i., Pl. XII., 5—7 ; *Phakellura gazorialis*, Gn., 297 ; *Eudioptis capensis*, Z., Caff., 52.

The larva feeds on melons in gardens and is sometimes very destructive.

Port Darwin, North Australia ; Duaringa, Queensland ; common. Also occurs in Samoa, Celebes, Java, Formosa, China, India, Ceylon, and South Africa.

GLYPHODES, *Gn.*

Forehead flat, very oblique. Ocelli present. Tongue well developed. Antennæ four-fifths of fore wings, in male filiform, evenly ciliated (¼). Labial palpi moderate, ascending, 2nd joint with long dense projecting scales beneath, truncate in front, terminal joint concealed. Maxillary palpi moderate, terminating in a fine pencil of hairs. Posterior tibiæ in male (*excelsalis*) with outer middle-spur one-sixth of inner, outer end-spur one-third ; in female (*perspicillalis*) with outer middle-spur two-thirds of inner, end-spurs equal. Abdomen rather elongate, in male with short truncate anal tuft; valves retracted. Fore wings with vein 11 long, oblique. Hind wings broader than fore wings; 3, 4, 5 closely approximated at base; 7 out of 6 near origin, anastomosing with 8 to beyond one-third.

a. Hind wings with dark fuscous posterior band.
  1. Hind margin of both wings narrowly white .. *excelsalis.*
  2. ,, ,, not white.
    i. White discal blotch of fore wings starting from costa .. .. *piepersialis.*
    ii. White discal blotch of fore wings not touching costa .. .. *perspicillalis.*
b. Hind wings without dark band .. .. .. *tolumnialis.*

Glyphodes tolumnialis, Walk.

Leucochroma tolumnialis, Walk., 492; *Oligostigma sexpunctalis*, Moore, Proc. Zool. Soc., 1877, 616, pl. lx., 12; *Glyphodes lomaspilalis*, Snell., Tijd. v. Ent., 1880, 223; *G. sexpunctalis*, ib., Tijd. v. Ent., 1883, pl. viii., 12; *Cataclysta nympha*, Butl., Proc. Zool. Soc., 1880, 684.

I have not been able to examine the structure of this species.

Eastern Australia; also from Celebes and Formosa.

Glyphodes excelsalis, Walk.

Glyphodes excelsalis, Walk., Suppl., 1360.

Apparently differs from *G. piepersialis* only by the white streak along hind margin of fore wings, and also along that of hind wings to below middle; and by the broad blackish margin of the white dorsal streak of fore wings.

Port Darwin, North Australia; one male. Walker's type is stated to be from West Australia. I hardly anticipate that the species is confined to Australia.

Glyphodes piepersialis, Snell.

Glyphodes piepersialis, Snell., Midd. Sum., 68, Tijd. v. Ent., 1883, pl. viii., 11; *G. malayana*, Butl., Proc. Zool. Soc., 1880, 684.

Duaringa, Queensland; one imperfect specimen received from Mr. G. Barnard. Also from Celebes, Borneo, and Formosa.

Glyphodes perspicillalis, Z.

Eudioptis perspicillalis, Z., Caff., 53; *Glyphodes diurnalis*, Gn., 294, pl. v., 5; *G. parvalis*, Walk., Suppl., 1355.

Port Darwin, North Australia; one specimen. Also from Celebes, Java, Ceylon, India, and South Africa.

SIRIOCAUTA, *Ld.*

Fore wings somewhat ridged, oblique. Ocelli present. Tongue well developed. Antennæ five-sixths of fore wings, slender, filiform, serrate towards apex, in male (?). Labial palpi moderately long, straight, porrected, triangularly scaled, terminal joint concealed. Maxillary palpi rather short, filiform. Legs long; posterior tibiæ (in female) with outer middle-spur one-fourth, outer end-spur one-third of inner. Abdomen elongate, in male (?). Fore wings with veins 4 and 5 closely approximated towards base, almost from a point with 3; 11 long, oblique. Hind wings broader than fore wings; 4 and 5 closely approximated towards base, 3 very near; 7 out of 6 near origin, anastomosing with 8 to middle.

Siriocauta testulalis, Hb.

Crochiphora testulalis, Hb., Zut., 629, 630; Gn., 247; Ld., 424 (non Z., Caff., 46); *Hydrocampa aquatilis*, Boisd., Guér. Ic., pl. xc., 9 (teste Walk.); *Maruca aquatilis*, Walk., 540.

Lederer's reference to Zeller (Caff., 46) is quite erroneous, the species there described being wholly different. I have not been able to examine the male.

Duaringa, Queensland; Sydney, New South Wales; two specimens. Also occurs in Amboina, Borneo, Japan, Ceylon, India, South and West Africa, Honduras, and Brazil.

RHIMPHALEA, *Ld.*

Forehead tolerably flat, oblique. Ocelli present. Tongue well developed. Antennæ as long as fore wings, in male filiform, towards apex somewhat serrate, ciliated with tufts of cilia (almost 1). Labial palpi moderate, somewhat ascending, 2nd joint with dense projecting scales beneath, terminal joint short, almost concealed. Maxillary palpi very short, filiform. Anterior tibiæ in male densely rough-haired beneath, posterior tibiæ with outer spurs about half inner, posterior tarsi long, basal joint somewhat bent. (Abdomen broken). Fore wings with vein 11 long, oblique. Hind wings as broad as fore wings; 3 moderately, 4 and 5 closely approximated at base, 7 out of 6 very near origin, anastomosing with 8 to one-third.

Lederer erroneously states the maxillary palpi to be absent.

Rhimphalea sceletalis, Ld.

Rhimphalea sceletalis, Ld., 411, pl. xv., 3.

Duaringa, Queensland; one imperfect specimen received from Mr. G. Barnard. I have seen a second, also from Queensland. Lederer's type was from Amboina.

SAMEODES, *Snell.*

Forehead somewhat ridged, rather oblique. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male (Snellen) filiform, sinuate in middle, shortly ciliated. Labial palpi moderate, 2nd joint with rough projecting scales, terminal joint exposed, smooth. Maxillary palpi short, filiform. Posterior tibiæ in male (Snellen) with a thickening above middle, outer middle-spur one-fourth of inner, end-spurs absent; in female outer spurs nearly half inner. Abdomen in male (?). Fore wings with vein 11 moderately long and oblique. Hind wings as broad as fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-third. Fore wings in male (Snellen) with a fold on middle of costa beneath.

Sameodes pipleidalis, Walk.

Stenia pipleidalis (*pipleisalis*), Walk., 420; *Lepyrodes lepidalis*, ib., 465; *Samea sidealis*, ib., 937; *Hymenia meridionalis*, ib., Suppl., 1314; *Sameodes trithyralis*, Snell., Tijd. v. Ent., 1880, 218; ib., 1883, pl. viii., 4; *Samea vespertinalis*, Saalm., Ber. Senck. Ges., 1880, 301.

I have not been able to examine the male.

Duaringa, Queensland; two specimens received from Mr. G. Barnard. Also occurs in Celebes, Java, Ceylon, India, and West and Central Africa.

PESSOCOSMA, n. g.

Forehead tolerably flat, oblique. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male slender, filiform, markedly sinuate in middle, ciliated with tufts of cilia

(1½). Labial palpi moderately long, straight, porrected, triangularly scaled, terminal joint moderately long, in male exposed, in female concealed. Maxillary palpi moderate, filiform. Posterior tibiæ with outer spurs half inner. Abdomen moderate, in male with short slender apical tuft; valves retracted. Fore wings with vein 11 moderately long and oblique. Hind wings as broad as fore wings; 4 and 5 approximated towards base, 3 tolerably approximated at base, 7 out of 6 near origin, anastomosing with 8 to beyond one-third.

Closely allied to *Sameodes*, of which it possesses the peculiar antennal sinuation of the male, but not the costal fold of the fore wings, nor are the terminal spurs of the posterior tibiæ absent.

Pessocosma iolealis, Walk.

Lepyrodes iolealis, Walk., 466.

♂, ♀, 16—18 mm. Head, palpi, and thorax ochreous-fuscous, mixed with ochreous-whitish. Antennæ light grey. Abdomen ochreous-fuscous, segmental margins white. Legs ochreous-fuscous, irrorated with white. Fore wings rather elongate-triangular, narrow at base, costa slightly sinuate, gently arched towards apex, apex tolerably rounded, hind margin waved, oblique, somewhat sinuate above, bowed in middle; ochreous-brown, mixed with whitish ochreous, and irregularly suffused with dark fuscous; markings white, semitransparent, laterally suffusedly edged with dark fuscous, consisting of several small subquadrate spots; two transversely placed at one-fourth, lower on inner margin, upper touching lower of two others transversely placed in disc immediately beyond them; two larger spots above and below middle of disc; an irregular obscure dark fuscous line from four-fifths of costa to two-thirds of inner margin, forming an angulated curve outwards on middle third, and followed on upper and lower portions by several small white lunate marks, on central portion by three small spots; two or three moderate spots transversely placed before upper part of this line; cilia white, with a fuscous line at one-third, terminal two-thirds sharply barred with fuscous. Hind wings markedly sinuate below apex; ground colour and markings much as in fore wings, but central spots attenuated and fascia-like, antemedian spots reduced to a suffused subbasal band; cilia as in fore wings.

Superficially much resembling *Samea* and *Sameodes*; smaller and darker than *S. pipleidalis*, with the markings differently placed.

Duaringa, Queensland; Sydney, New South Wales; three specimens in March. Herr Snellen returned me the species as unknown to him.

DIASEMIA, *Gn.*

Forehead somewhat rounded, rather oblique. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male filiform, ciliated with tufts of cilia ($1\frac{1}{3}$). Labial palpi rather long, porrected, second joint with long obliquely projecting scales beneath, terminal joint rather drooping, loosely scaled. Maxillary palpi moderate, towards apex loosely dilated with scales. Posterior tibiæ with spurs almost equal. Abdomen elongate, in male with slender anal tuft; valves retracted. Fore wings with vein 11 moderate, tolerably oblique. Hind wings one-fourth broader than fore wings; 3, 4, 5 tolerably remote; 7 out of 6 rather near origin, anastomosing with 8 to one-fourth, shortly.

I have not examined *D. ramburialis*, of which my specimens are not to hand. *D. grammalis* is quite identical in structure with the European *D. litterata.*

Diasemia ramburialis, Dup.

Diasemia ramburialis, Dup.; Gn., 334; Z., Caff., 30; *Isopteryx melaleucalis*, Walk., 402; *Diasemia reconditalis*, ib., Suppl., 1325; *D. leucophæalis*, ib., Suppl., 1326.

I have compared two named European types in Zeller's collection with those of Walker and my own.

Duaringa, Queensland; also from Southern Europe and Ceylon.

Diasemia grammalis, Dbld.

Diasemia grammalis, Dbld., Dieff. N. Z., ii., 287; *D. spilonotalis*, Snell., Midd. Sum., 73.

Herr Snellen kindly sent me a type of his species, which appears identical with that of Doubleday; only the white line of the hind wings forms almost a right angle inwards above middle, whilst in New Zealand it is never more than very obtusely bent. Doubleday's descriptions of New Zealand species are clear and good.

Hamilton, Masterton, and Castle Hill, New Zealand; in January and March, common amongst rough herbage in dry places, but rather local. Also occurs in Java, Sumatra, and Celebes. I should like to see a series from various localities.

SCELIODES, *Gn.*

Forehead with a moderate obtuse conical projection. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male serrate, ciliated with tufts of cilia (1). Labial palpi rather long, straight, porrected, somewhat ascending, basal joint with a projecting tuft beneath, 2nd joint with evenly projecting scales, somewhat produced at apex beneath, terminal joint rather slender, moderate, exposed, with appressed scales. Maxillary palpi extremely short, filiform. Posterior tibiæ with spurs extremely short, outer spurs somewhat shorter than inner. Abdomen elongate, in male with a moderate anal tuft; valves large, exserted. Fore wings with vein 11 moderately long and oblique. Hind wings as broad as fore wings; 3, 4, 5 tolerably remote; 7 out of 6 near origin, anastomosing with 8 to one-third.

Not nearly allied to any genus known to me; characterised specially by the peculiarly short spurs. Snellen's genus *Eretria* was founded on this species, and must lapse.

Sceliodes cordalis, Dbld.

Margaritia cordalis, Dbld., Dieff. N. Z., ii., 288; *S. mucidalis*, Gn., 400; *Daraba extensalis*, Walk., Suppl., 1311; *Eretria obsistalis*, Snell., Tijd. v. Ent., 1880, 206; ib., 1883, pl. vi., 12.

Guenée's description is sufficiently good; Snellen's figure is poor, but he informs me that his species is identical with a type of this insect which I sent him.

Duaringa, Queensland; Sydney, New South Wales; Mount Lofty range, South Australia; Taranaki and Wanganui, New Zealand. Tolerably common in February and March, coming freely to lamps, but not often seen otherwise. Also from Celebes.

CNAPHALOCROCIS, *Ld.*

Forehead flat, oblique, somewhat ridged in front. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, joints angularly projecting towards apex, evenly ciliated (⅓). Labial palpi moderately long, straight, porrected, triangularly scaled. Maxillary palpi moderate, dilated with loose scales towards apex, truncate. Posterior tibiæ with outer spurs about half inner; anterior tibiæ in male very short, strongly dilated with hairs. Abdomen elongate, in male with very slender pointed anal tuft; valves retracted. Fore wings with veins 10 and 11 short-stalked in male, long-stalked in female. Hind wings as broad as fore wings; 3, 4, 5 closely approximated at base; 7 out of 6 near origin, anastomosing with 8 almost to apex. Fore wings in male with an indentation beneath costa before middle, covered above by a rough double coalescing tuft of hairs, and a tuft of hairs from middle of costa curved back over disc.

Lederer did not make out the peculiar venation of the fore wings, which destroys the distinction of his family *Homophysidæ*; nor am I aware that it has been noticed since. This and the following genus belong to a group specially characterised by the structure of veins 7 and 8 of the hind wings, which anastomose throughout almost the whole of their length. The tufts or excrescences on the fore wings of the male in this and some other species are probably not to be depended on as generic characters, which are here well marked in the neuration.

Cnaphalocrocis rutilalis, Walk.

Botys rutilalis, Walk., 665; *B. iolealis*, ib., 666; *B. nurscialis*, ib., 724; *Cnaphalocrocis iolinalis*, Ld., pl. xii., 7.

Duaringa, Queensland; sent commonly by Mr. G. Barnard. Also occurs in Celebes, Borneo, China, Ceylon, India, and Texas (the last locality on the authority of Snellen).

DOLICHOSTICHA, n. g.

Forehead flat, somewhat oblique. Ocelli present. Tongue well developed. Antennæ four-fifths of fore wings, slender, pubescent, joints somewhat expanded in middle, with terminal whorls of scales in male (?). Labial palpi moderate, somewhat ascending, 2nd joint with long dense scales produced beneath in a broad subquadrate tuft, terminal joint small, concealed. Maxillary palpi rather short, dilated with scales towards apex. Posterior tibiæ with outer middle-spurs about half, outer end-spurs three-fourths of inner. Abdomen moderate, in male (?). Fore wings with vein 11 long, oblique. Hind wings somewhat broader than fore wings; 3, 4, 5 tolerably approximated at base, 7 out of 6 near origin, anastomosing with 8 almost throughout.

Near *Cnaphalocrocis*, but 10 and 11 of fore wings separate.

Dolichosticha venilialis, Walk.

Asopia venilialis, Walk., 373; *Botys marisalis*, ib., 717.

♀, 17 mm. Head pale ochreous, with a fine white line on each side of face. Palpi ochreous, beneath white. Antennæ whitish ochreous. Thorax light ochreous, paler posteriorly. Abdomen pale ochreous, apex darker, base whitish. Legs whitish. Fore wings moderate, triangular, costa straight, moderately arched towards apex, apex obtuse, hind margin obliquely rounded; whitish ochreous, thinly scaled; costa between first and second lines with about eight small dark fuscous spots; a rather broad indistinct fuscous suffusion beneath costa from base to second line; lines fine, fuscous; first from one-fourth of costa to one-third of inner margin, slightly curved; second from three-fourths of costa to middle of inner margin, shortly sinuate beneath costa, abruptly right-angled at two-thirds to below discal spot; discal spot rather small, linear, dark fuscous; a moderately broad fuscous hind marginal band, darker anteriorly, rather dilated on costa, and again more abruptly at anal angle to touch angulation of second line; a darker hind marginal line; cilia ochreous-whitish, with a dark grey line at one-third. Hind wings ochreous-whitish, semi-transparent; a tolerably straight fine fuscous line from opposite one-third of costa to two-thirds of inner margin; a short straight similar line slightly beyond middle from near costa to between veins 2 and 3; hind marginal band and cilia as in fore wings.

The male is unknown to me, and may perhaps have peculiar characters. A pale inconspicuous species.

Rosewood, Queensland, in September; Sydney, New South Wales, in May; three specimens. Also occurs in Borneo. Snellen returned it as unknown to him.

BŒOTARCHA, n. g.

Forehead flat, very oblique. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male apparently stout, ciliated (?). Labial palpi moderately long, straight, porrected, with dense tolerably appressed scales, terminal joint moderate. Maxillary palpi moderate, dilated with dense scales towards apex, obliquely truncate. Posterior tibiæ in female with outer spurs one-third of inner. Abdomen long, in male proportionately very stout, pointed; in female (?). Fore wings with vein 11 moderately long and oblique. Hind wings broader by one-fourth than fore wings; 3, 4, 5 closely approximated at base, 7 out of 6 near origin, anastomosing with 8 very shortly to one-fifth.

I have not been able to examine the male, and Snellen gives no characters for it. The genus is peculiar, and at present of uncertain affinity; the very oblique forehead recalls the first group of the family, but the shorter antennæ are a discordant character.

Bœotarcha crassicornis, Walk.

Botys crassicornis, Walk., Suppl., 1455; *B. tænialis*, Snell., Tijd. v. Ent., 1880, 209; ib., 1883, pl. vii., 3.

A singularly marked species.

Port Darwin, North Australia; one female. Also from Celebes.

NOMOPHILA, *Hb.*

Forehead flat, oblique. Ocelli present. Tongue well developed Antennæ two-thirds of fore wings, in male filiform, ciliated with tufts of cilia (1½). Labial palpi moderately long, straight, porrected, triangularly scaled, terminal joint concealed. Maxillary palpi very short, filiform. Posterior tibiæ with both outer spurs less than half inner. Abdomen moderately elongate, margins angularly dilated, in male with short anal tuft; valves retracted. Fore wings with vein 11 moderate, oblique. Hind wings twice as broad as fore wings; 3, 4, 5 almost from a point, 4 and 5 closely approximated towards base, 7 out of 6 near origin, anastomosing with 8 to before middle.

Also an abnormal and isolated genus, of questionable affinity; the unusually broad hind wings and narrow fore wings show a resemblance to some of the *Scopariadæ*, but the reduced and very different maxillary palpi are probably a sufficient proof that there is really no close affinity.

Nomophila noctuella, Schiff.

Stenopteryx hybridalis, Hb.; *Scoparia itysalis*, Walk., 828.

Duaringa, Queensland; Newcastle and Sydney, New South Wales; Melbourne, Victoria; Mount Lofty range, Wirrabara, and Port Lincoln, South Australia; common in September, October, and from January to March. Also throughout Europe, Asia, Africa, and America. In face of this wide range it should be observed that it appears to be absent from New Zealand and Tasmania.

TETRACONA, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, ciliated with tufts of long cilia (2). Labial palpi moderate, arched, ascending, basal joint with dense scales forming a terminal projection beneath; 2nd joint scaled so as to form two similar projections, in middle and at apex; terminal joint with a fourth similar projection whence scales diminish to apex, so as to appear obliquely truncate. Maxillary palpi very short, filiform. Posterior tibiæ with outer middle-spur one-fourth, outer end-spur two-fifths of inner. Abdomen elongate, slender, in male with a very small bifid anal tuft; valves retracted, clothed with fine loose hairs, which rise from the base and are withdrawn or exposed with the valves. Fore wings with vein 11 moderately long and oblique. Hind wings slightly broader than fore wings; 3, 4, 5 approximated at base; 7 out of 6 near origin, anastomosing with 8 to one-third.

Probably allied to *Agrotera*; characterised by the peculiar four-tufted palpi, of which the terminal joint resembles that of *Agrotera*, but is also found in other genera not nearly related.

Tetracona amathealis, Walk.

Ædiodes amathealis, Walk., 348; *Pyralis ornatalis*, ib., Suppl., 1246.

♂, ♀, 17—21 mm. Head, palpi, and thorax reddish orange, mixed with pale yellow. Antennæ whitish ochreous, spotted with dark fuscous above. Abdomen ochreous, three basal segments mixed with yellow and orange on back, three terminal segments suffused with whitish above. Legs white, anterior tibiæ ochreous, tarsi with two ochreous rings and a subapical black band, middle tibiæ fuscous above. Fore wings moderately broad, triangular, narrow at base, costa at first straight, posterior half moderately arched, apex obtuse, hind margin somewhat bowed, rather strongly oblique, scales on inner margin dilated before middle; rather light purplish grey; a slightly irregular straight dark fuscous line from two-fifths of costa to before middle of inner margin; basal area up to this line wholly pale yellow, mixed with reddish orange, with a short oblique fuscous mark on costa near base; a suffused whitish central fascia parallel to first line, sometimes indistinct; a small black discal dot; a narrow orange irregularly dentate fascia from three-fourths of costa to three-fourths of inner margin, mixed with pale yellow, and suffusedly margined with blackish; a row of fine black linear marks along hind margin; cilia pale whitish grey, broadly interrupted with white below apex, with a grey line spotted with dark fuscous. Hind wings whitish; a rather broad suffused light purplish grey hind-marginal band, closely preceded by a somewhat irregular purplish grey line, rather sharply dentate inwards below middle; a triangular reddish ochreous spot, mixed with pale yellow, on middle of inner margin, posteriorly black-margined; a row of black linear marks along hind margin; cilia white, with an interrupted dark fuscous line.

A very elegant insect, coloured somewhat as in *Agrotera*.

Duaringa and Brisbane, Queensland; taken in September, and received from Mr. G. Barnard; seven specimens.

ZINCKENIA, *Z.*

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male serrate, evenly ciliated ($\frac{1}{3}$), thickened towards base, notched above basal joint, basal joint stout, with a broad erect projection of dense scales on inner side. Labial palpi moderate, curved, ascending, 2nd joint with dense projecting scales beneath, terminal joint moderately long, slender, pointed. Maxillary palpi moderate, filiform. Posterior tibiæ with outer spurs almost as long as inner. Abdomen moderate, in male with small slender apical tuft; valves retracted. Fore wings with vein 11 moderately long and oblique. Hind wings one-third broader than fore wings; 4 and 5 closely approximated towards base, 7 out of 6 near origin, anastomosing with 8 to one-third.

Coptobasis, Ld. closely approaches this genus, although widely removed from it by Lederer himself. The two species are both well known.

Zinckenia recurvalis, F.

Phalæna recurvalis, F., E. S., 407; Z., Caff., 55; Gn., 225; *P. angustalis*, F., Mant., 309; *P. fascialis*, Stoll., pl. xxxvi., 13; Cr. 398; O.; *Hydrocampa albifacialis*, Boisd., Mad., 119, pl. xvi., 1.

Sydney, New South Wales; Auckland, New Zealand; not common. Also occurs in Java, Japan, China, Ceylon, India, Mauritius, Madagascar, South Africa, West Indies, and South America.

Zinckenia perspectalis, Hb.

Pyralis perspectalis, Hb., Exot., 101; Gn., 226; *Zinckenia primordialis*, Z., Caff., 56; *Spoladea exportalis*, Gn., 227.

Duaringa and Rosewood, Queensland; in September, not common. Also occurs in India, West Indies, North and South America, and South Africa.

MOLYBDANTHA, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male filiform, evenly ciliated (½), somewhat serrate towards apex. Labial palpi moderate, somewhat arched, ascending, 2nd joint with dense projecting scales beneath, terminal joint rather short, thick, filiform, exposed, porrected. Maxillary palpi rather large, broadly dilated with scales towards apex, obliquely truncate. Posterior tibiæ with outer spurs about half inner. Abdomen moderate, in male with slender somewhat trifid anal tuft; valves retracted. Fore wings with vein 11 moderate, oblique. Hind wings one-fourth broader than fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-third.

Apparently allied to *Notarcha*, but immediately separated by the triangularly dilated maxillary palpi.

Molybdantha bracteolalis, Z.

Botys bracteolalis, Z., Caff., 30; *Isopteryx plumbalis*, Gn., 231; *I. abnegatalis*, Walk., 404; *Botys abnegatalis*, Ld., pl. xi., 17.

Duaringa, Queensland; several specimens received from Mr. G. Barnard. Also occurs in Sumatra, Java, Ceylon, West and South Africa.

Eurrhyparodes accessalis, Walk. (*stibialis*, Snell.) has considerable superficial resemblance to this species, and is perhaps nearly related.

CONCHYLODES, *Gn.*

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male filiform, evenly ciliated (½), rough-scaled above. Labial palpi moderate, arched or almost recurved, ascending, 2nd joint with appressed scales, terminal joint slender, filiform, almost acute. Maxillary palpi very short, filiform. Posterior tibiæ with outer spurs less than half inner. Abdomen moderate, in male with slender anal tuft; valves retracted. Fore wings with vein 11 very long, oblique. Hind wings as broad as fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-half. Hind wings in male with median fold dilated and enlarged in cell into an elongate-oval depression.

Nearly allied to *Notarcha*, of which it appears to be a development.

Conchylodes meritalis, Walk.

Zebronia meritalis, Walk., 479; *Z. plexippusalis*, ib., 485; *Conchylodes baptalis*, Snell., Tijd. v. Ent., 1880, 42.

I sent a type to Snellen, who identified it as his species.

Duaringa, Queensland; several specimens received from Mr. G. Barnard. Also occurs in Celebes, Java, and Ceylon.

NOTARCHA, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, ciliated with tufts of cilia (1½) or evenly (¼), scaled or pubescent above. Labial palpi moderate, arched, ascending, 2nd joint with dense projecting scales beneath, terminal joint short, thick, cylindrical. Maxillary palpi moderate, filiform. Posterior tibiæ with outer spurs somewhat less than half inner. Abdomen elongate, in male with slender anal tuft; valves retracted. Fore wings with vein 11 long, oblique. Hind wings slightly broader than fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-third.

The genus forms two sections, distinguished by the character of the antennal ciliations; it is not likely that this point would prove sufficiently definite for generic separation. The only European species of the genus is *N. ruralis*, Sc., which belongs to the second section, agreeing closely with *N. multilinealis*. The genus is, however, well represented in the Indo-Malayan region.

Lines dark fuscous.
1. Wings yellow .. .. *clytalis*.
2. ,, ochreous-whitish .. .. *multilinealis*.

b. Lines ochreous-yellow.

1. Discal spot of fore wings sharply triangular, blackish .. .. *cassalis.*
2. Discal spot of fore wings yellow, or with a few dark fuscous scales .. .. *chrysoplasta.*

A. Antennæ of male ciliated with tufts of cilia ($1\frac{1}{2}$).

Notarcha chrysoplasta, n. s.

♂, ♀, 22—23 mm. Head, palpi, antennæ, thorax, abdomen, and legs ochreous-yellow; palpi with a spot on basal joint, and terminal joint except apex blackish; anterior tibiæ with apical half blackish, tarsi with apex of 1st joint broadly, of others very narrowly blackish. Fore wings moderate, triangular, costa very slightly sinuate, gently arched posteriorly, apex obtuse, hind margin obliquely rounded; light ochreous-yellow, with darker ochreous-yellow markings; two irregular lines near base; an irregular somewhat curved line from one-fourth of costa to one-third of inner margin; a small discal spot; an irregular line from costa at two-thirds to middle of inner margin, rectangularly arched outwards in middle and returning to beneath discal spot; a suffused subterminal band, contracted or interrupted a little above inner margin; sometimes three minute blackish subcostal dots near base, at one-fourth, and two-thirds, and also one on discal spot, but these are often wholly absent; cilia with basal half ochreous-yellow, apical half whitish yellow. Hind wings with ground colour and markings as in fore wings, but two basal lines absent, no black dots, subterminal band tinged with fuscous-grey; cilia as in fore wings.

Belongs to the same group of closely allied species as *N. cassalis*, Walk., and *N. trigalis*, Ld.; distinguished from the rest by the usual obsolescence of the blackish dots. Compared with *N. cassalis* it is larger, the ground colour yellower and markings less defined, and the subterminal band of hind wings is distinctly tinged with grey.

Duaringa, Queensland; four specimens received from Mr. G. Barnard.

Notarcha cassalis, Walk.

Zebronia cassalis (*cassusalis*), Walk., 477; *Z. aurolinealis*, ib., 478; *Astura obrinusalis*, ib., 549 (nec Ld.); *Botys faustalis*, Ld., pl. x., 15.

Lederer's species, figured as *obrinalis* (*obrinusalis*), Walk., is certainly not this insect, but probably identical with *plutalis* (*plutusalis*), Walk. *N. cassalis* is the smallest species of the group, very similar to *N. plutalis*, but with the black spots smaller, and the angle of the second line of the fore wings less rectilinear.

Duaringa and Brisbane, Queensland; common in September and October. Also occurs in Celebes, Java, Sumatra, Ceylon, India, and South Africa.

Notarcha clytalis, Walk.

Astura clytalis (*clytusalis*), Walk., 550; *Botys clytialis*, Ld., pl. x., 16.

Duaringa, Queensland; Sydney, New South Wales; common on its food-plant. The larva feeds on *Sterculia*, and is gregarious, living socially in a large nest of silk and leaves.

B. Antennæ of male evenly ciliated (¼).

Notarcha multilinealis, Gn.

Botys multilinealis, Gn., 337, pl. viii., 11; *Zebronia salomealis*, Walk., 476, Suppl., 1348; *Botys otysalis*, ib., 723; *B. annuligeralis*, ib., Suppl., 1424; *B. basipunctalis*, Brem.

Duaringa and Rosewood, Queensland; three specimens in September. Also occurs in New Guinea, Celebes, Java, Japan, India, and South Africa.

DEUTERARCHA, n. g.

Forehead rounded, rather projecting. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male filiform, evenly ciliated (¼), rough-scaled above. Labial palpi moderate, arched, ascending, 2nd joint with dense projecting scales beneath, terminal joint short, thick, cylindrical, truncate. Maxillary palpi moderate, filiform. Posterior tibiæ with outer spurs somewhat less than half inner. Abdomen elongate, in male with slender anal tuft; valves retracted. Fore wings with vein 11 moderately long, oblique. Hind wings somewhat broader than fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-fourth.

Distinguished from *Notarcha* by the rounded rather projecting forehead, which yet hardly forms a distinct protuberance. Both species are somewhat peculiar in appearance, and have little resemblance to each other.

Deuterarcha xanthomela, n. s.

♂, ♀, 14—15 mm. Head and palpi light ochreous-yellow. Antennæ fuscous. Thorax dark fuscous, two small spots on anterior margin and terminal half of patagia ochreous-yellow. Abdomen fuscous, segmental margins yellow. Legs yellowish, somewhat suffused with fuscous above. Fore wings moderate, triangular, costa faintly sinuate, gently arched towards apex, apex rounded, hind margin rounded, rather strongly oblique; rather dark fuscous, darker on costa, slightly purplish tinged, with well-defined ochreous-yellow markings; a rounded spot on inner margin almost at base, almost reaching costa; a large trapezoidal blotch extending on inner margin from one-fourth to two-thirds, its upper edge parallel and very near to costa; a moderately large suboblong spot on costa at two-thirds, not reaching middle; a small spot on inner margin before anal angle; sometimes a very obscure yellowish fascia from costa before apex to below middle of hind margin; cilia dark fuscous. Hind wings rather dark fuscous, costa suffused with yellow; cilia dark fuscous.

A handsome and conspicuous species.

Duaringa, Queensland; several specimens received from Mr. G. Barnard.

Deuterarcha mesochlora, n. s.

♂, ♀, 14—16 mm. Head whitish ochreous, crown mixed with dark fuscous. Palpi whitish ochreous, externally banded with dark fuscous beneath apex of joints. Antennæ whitish ochreous, annulated with dark fuscous. Thorax dark fuscous, mixed with whitish ochreous. Abdomen whitish ochreous, with a suffused dark fuscous band before middle. Legs whitish ochreous, banded with dark fuscous. Fore wings somewhat elongate, triangular, costa faintly sinuate, gently arched towards apex, apex rounded, hind margin obliquely rounded; pale dull whitish ochreous; first line straight, thick, blackish, from one-third of costa to two-fifths of inner margin, basal area up to this line rather dark fuscous; second line thick, blackish, from three-fourths of costa to beyond middle of inner margin, obtusely indented outwards in middle, hind marginal area beyond this line rather dark fuscous; a cloudy fuscous discal spot; three small semicircular blackish fuscous-centred marks on costa between first and second lines; cilia whitish ochreous, somewhat suffused with fuscous, with a broad darker line. Hind wings pale ochreous-yellow, with a broad rather dark fuscous hind-marginal band, attenuated to anal angle, irregularly indented in middle; cilia ochreous-whitish, with a suffused dark fuscous line.

Readily recognised by the contrast between the pale central and dark basal and hind marginal areas.

Duaringa, Queensland; several specimens received from Mr. G. Barnard.

CONOGETHES, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male (?). Labial palpi moderate, arched, ascending, 2nd joint densely rough-scaled beneath, terminal joint conically scaled, base as thick as apex of 2nd joint, apex pointed. Maxillary palpi rather short, filiform. Posterior tibiæ with outer spurs one-third of inner. Abdomen moderate, in male (?). Fore wings with vein 11 moderately long, oblique. Hind wings as broad as fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin or from a point with 6 (*punctiferalis*), anastomosing with 8 to beyond one-third.

I have not been able to examine the characters of the male, but they are probably not different from those of *Notarcha*, from which the genus is distinguished by the quite different form of the terminal joint of the labial palpi.

a. Wings with dark fuscous dots and lines .. *punctiferalis*.
b. ,, without ,, ,, .. *infundibulalis*.

Conogethes punctiferalis, Gn.

Astura punctiferalis, Gn., 320; *A. ersealis*, Walk., 980; *Botys evaxalis*, ib., 995; *B. nicippealis*, ib., 999; *Astura guttatalis*, ib., Suppl., 1381; *A. semifascialis*, ib., Suppl., 1381.

Astura semifascialis, Walk., seems to be a variety with a dark fuscous central suffusion, the markings not otherwise different.

Brisbane, Queensland; one specimen in September. Also from Ceram, China, and India.

Conogethes infundibulalis, Snell.

Botys infundibulalis, Snell., Midd. Sum., 64.

I sent a type to Snellen, who returned it as above.

Duaringa and Toowoomba, Queensland, in September; two specimens. Also occurs in Sumatra.

PACHYZANCLA, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male (?). Labial palpi moderate, somewhat arched, ascending, 2nd joint densely rough-scaled beneath, terminal joint thick, conical, base as thick as apex of 2nd joint. Maxillary palpi rather short, filiform. Posterior tibiæ with outer spurs one-third of inner. Abdomen moderate, in male (?). Thorax in male with patagia broadly elongate, nearly twice as long as thorax. Fore wings with vein 11 moderately long, oblique. Hind wings as broad as fore wings ; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to beyond one-third.

I have not examined the male, but have seen one. The genus is distinguished from *Conogethes* by the elongate patagia (which are not, however, produced into an elongate pencil as in *Omiodes*) ; the palpi are essentially similar, but considerably stouter.

Pachyzancla mutualis, Z.

Botys mutualis, Z., Caff., 40 ; *B. stultalis*, Walk., 669 ; *B. retractalis*, ib., Suppl., 1447 ; *B. ægrotalis*, Snell. (nec Z.), Tijd. v. Ent., 1872, 90, pl. vii., 8 ; Midd. Sum., 63.

I sent a type to Snellen, who assures me that it is identical with a specimen of *mutualis*, Z., communicated to him by Zeller himself. The specimens in the British Museum, added by Butler to *Botys bianoralis*, Walk., are this species (Walker's is an *Omiodes*, probably identical with one of Guenée's) ; the specimens added by Butler to *stultalis*, Walk., are *Botys phæopteralis*, Gn.

Duaringa, Queensland ; two specimens sent by Mr. G. Barnard. Also occurs in Celebes, Java, Borneo, Japan, Ceylon, and South Africa.

PELECYNTIS, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, evenly ciliated (½), rough-scaled above. Labial palpi moderate, arched, ascending, basal joint with a tuft of projecting scales, 2nd joint with long projecting scales beneath, somewhat separated in middle to form two angular tufts, terminal joint very short, broadly dilated with scales towards apex so as to become triangular.

Maxillary palpi moderate, filiform, loosely scaled towards apex. Posterior tibiæ with outer middle-spur less than one-third of inner, outer end-spur less than one-half. Thorax in male with a tuft of very long scales from extremity of patagia. Abdomen elongate, in male with dense rather long anal tuft; valves retracted. Fore wings with vein 11 long, oblique. Hind wings somewhat broader than fore wings; 3, 4, 5 closely approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-third.

Allied to *Pachyzancla*, but differing from it and *Omiodes* by the triangularly dilated terminal joint of the labial palpi; it has the elongate tuft of the patagia much as in *Omiodes*.

Pelecyntis abstitalis, Walk.

Pyrausta abstitalis (*absistalis*), Walk., 311; *Asopia lydialis*, ib., 374; *Botys ustalis*, Ld., pl. x., 14.

Duaringa and Brisbane, Queensland, in September; three specimens. Also from Amboina, Ceylon, and India.

HELLULA, *Gn.*

Forehead flat, oblique. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male stout, evenly ciliated ($\frac{1}{4}$). Labial palpi moderate, obliquely ascending, 2nd and terminal joints triangularly dilated towards apex of each with projecting scales. Maxillary palpi moderately long, very slender, filiform. Posterior tibiæ with outer spurs nearly as long as inner. Abdomen moderate, in male with short truncate anal tuft; valves retracted. Fore wings with vein 11 moderate, tolerably oblique. Hind wings one-fourth broader than fore wings; 4 and 5 from a point, 7 from a point with 6, anastomosing with 8 to one-third. Lower median vein of hind wings with long loose pectination towards base.

Lederer makes the surprising error of stating that the maxillary palpi are absent, directly contradicting Herrich-Schäffer, who had seen them; they are as well developed as in any genus, but unusually slender. Moreover, he does not notice the pectination of the lower median. The genus is of uncertain affinity.

Hellula undalis, F.

Phalæna undalis, F., E. S., 362; Gn., 416; *Hellula hydralis*, Gn., 416; *Scopula criasusalis*, Walk., 1016; *Scoparia optatusalis*, ib., 1018; *Pyralis subtrigonalis*, ib., Suppl., 1244.

H. hydralis, Gn., is certainly only a common variety of the female.

Duaringa and Toowoomba, Queensland; Sydney, New South Wales; Melbourne, Victoria; Mount Lofty range, Port Lincoln, and Quorn, South Australia; very common generally; in September, October, November, and May. Also occurs in South Europe, India, and South Africa.

PROTERNIA, n. g.

Forehead with a blunt rounded projection. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male stout, evenly ciliated (¼), rough-scaled above, sinuate and bent at two-thirds, with a row of projecting scales in bend beneath, beyond it rapidly attenuated. Labial palpi moderately long, straight, porrected or somewhat ascending, 2nd joint with dense projecting scales beneath, terminal joint almost concealed. Maxillary palpi moderate, slender, filiform. Posterior tibiæ with outer spurs half inner. Abdomen moderate (in male broken). Fore wings with vein 11 long, oblique. Hind wings as broad as fore wings; 3, 4, 5 tolerably approximated at base, 7 out of 6 near origin, anastomosing with 8 to near middle.

Allied to *Semioceros*, from which it differs by the frontal projection, and by the antennal bend not being tufted above but containing a row of scales beneath.

Proternia philocapna, n. s.

♂, ♀, 21—26 mm. Head, palpi, antennæ, thorax, and abdomen rather dark fuscous, mixed with whitish ochreous. Legs dark fuscous, apex of joints and posterior pair whitish ochreous. Fore wings moderate, triangular, costa at first almost straight, on posterior half moderately arched, apex rectangular, hind margin slightly waved, obliquely rounded; rather dark fuscous, somewhat mixed with paler; markings obscurely darker fuscous; first line irregular, from one-third of costa to before middle of inner margin; a small round pale-centred spot in disc before middle, and an 8-shaped pale-centred discal spot; second line from three-fourths of costa to two-thirds of inner margin, rather sharply dentate, irregularly curved outwards below middle, followed by an obscure whitish ochreous line, tolerably distinct towards costa; an interrupted dark fuscous hind-marginal line; cilia whitish ochreous, mixed with fuscous, suffusedly spotted with dark fuscous towards base. Hind wings fuscous, darker on hind margin, obscurely mixed with whitish ochreous towards base; a cloudy dark fuscous discal spot; a faint irregular dentate pale posterior line; cilia ochreous-whitish, with an interrupted dark fuscous line.

A very dull-looking species.

Hamilton, New Zealand; five specimens (one male, four females) taken in a house, presumably attracted by light, in January.

SEMIOCEROS, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male stout, subdentate or serrate, evenly ciliated ($\frac{1}{3}$) (*murcalis*) or with tufts of cilia ($1\frac{1}{4}$), rough-scaled above, bent before middle (not in *amphicedalis*), sharply bent beyond middle, with a tuft of scales on back above bend. Labial palpi moderate, porrected or ascending, 2nd joint with short dense projecting scales beneath, terminal joint short, stout, obtuse, exposed. Maxillary palpi short, slender, filiform. Posterior tibiæ with outer middle-spurs one-third, outer end-spurs one-half of inner. Abdomen moderate, in male with very short truncate tuft; valves retracted. Fore wings with vein 11 moderately long and oblique. Hind wings as broad as fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to near middle.

Easily recognised by the antennal characters. To this genus belongs also (as I am assured by Snellen) *Botys gratalis*, Ld.

a. Fore wings light yellow	*chrysorycta*.
b. ,, suffused with fuscous.	
1. Discal space before second line suffused with whitish	*amphicedalis*.
2. Discal space before second line fuscous ..	*murcalis*.

Semioceros amphicedalis, Walk.

Salbia amphicedalis, Walk., 363.

♂, 22 mm. Head, palpi, and thorax rather dark fuscous, thorax mixed with whitish posteriorly, palpi with lower half white. Antennæ whitish, annulated with fuscous. Abdomen fuscous, mixed with white, with a suffused white basal band. Legs whitish, anterior tibiæ and tarsi, and middle tarsi dark fuscous, apex of joints whitish. Fore wings moderate, triangular, costa slightly sinuate, gently arched towards apex, apex tolerably rectangular, hind margin obliquely rounded; grey-whitish, with purple reflections, towards inner margin ochreous-tinged; costa with about six small dark fuscous spots; a rather dark fuscous suffusion along costa from base to three-fifths; a suffused fuscous basal patch; a small round dark fuscous pale-centred spot in disc at one-third, a similar spot below it, and a curved-oblong similar discal spot; second line dark fuscous, from four-fifths of costa to two-thirds of inner margin, waved, middle third abruptly curved outwards; a broad fuscous hind marginal band, extending almost to second line; cilia grey, basal third whitish barred with dark fuscous, with a rather large white spot at anal angle. Hind wings with ground colour, second line, and hind-marginal band as in fore wings; a dark fuscous discal spot; cilia white, basal third barred with dark grey.

I have not seen the type of this species; it is the only one of Walker's which I have identified from the description alone, but I believe it is correct.

Duaringa, Queensland; one specimen received from Mr. G. Barnard.

Semioceros murcalis, Walk.

Nacoleia murcalis (*murcusalis*), Walk., 935; *Isopteryx sordidalis*, ib., Suppl., 1317; *Botys hypsidesalis*, ib., 1006.

♂, ♀, 16—21 mm. Head, palpi, antennæ, thorax, and abdomen brownish ochreous mixed with dark fuscous; palpi snow-white on lower half. Legs whitish ochreous, anterior tibiæ dark fuscous towards apex. Fore wings moderate, triangular, costa slightly sinuate, moderately arched towards apex, apex round-pointed, hind margin sinuate, rather strongly oblique; brownish ochreous, irrorated with dark fuscous; lines rather thick, conspicuous, dark fuscous; first line irregular, from one-fifth of costa to one-third of inner margin; second from three-fourths of costa to three-fifths of inner margin, irregularly dentate, sharply angulated inwards at two-thirds to beneath discal spot, followed by an ochreous-whitish line, angulation filled with a dark fuscous suffusion; a subquadrate discal spot, not darker than ground colour, but laterally dark-margined, and a smaller similar spot in disc before middle, the space between these forming a conspicuous white spot; a more suffused white spot beyond discal spot, and a whitish mark before first spot; a row of crescentic dark fuscous spots on hind margin; cilia whitish ochreous, with a dark fuscous line at one-third, terminal portion grey, a subquadrate white spot at anal angle. Hind wings with ground colour and markings as in fore wings, but apex suffused with dark fuscous, first line and first discal spot obsolete, costa suffused with whitish; cilia white, with a dark grey line at one-third.

Duaringa and Toowoomba, Queensland; Sydney, New South Wales; Launceston and Deloraine, Tasmania; common, in September, November, and March; almost certainly attached to *Acacia decurrens*.

Semioceros chrysorycta, n. s.

♂, ♀, 14—16 mm. Head, palpi, antennæ, thorax, abdomen, and legs pale ochreous-yellow; a small dark fuscous spot on shoulder; two dark fuscous rings on abdomen before middle, and a band near apex; anterior tibiæ dark fuscous towards apex. Fore wings moderate, triangular, costa sinuate, moderately arched towards apex, apex almost rectangular, hind margin obliquely rounded; light ochreous-yellow, markings dark fuscous; an interrupted line almost at base, and a spot on costa near base; an 8-shaped yellow-centred mark in disc at one-third, connected with inner margin at one-third by a straight line; a suboval yellow-centred discal spot; a line from three-fourths of costa to two-thirds of inner margin, sinuate inwards towards costa, sharply angulated inwards to below discal spot; a narrow streak along hind margin, forming a triangular spot above middle, and another at anal angle touching angulation of second line; cilia white, with a dark grey line at one-third. Hind wings with ground colour and hind-marginal markings as in fore wings; two dark fuscous lines at one-third and two-thirds, first straight, second irregular; cilia as in fore wings.

Lederer's *gratalis* is very similar to this species, but has a broader dark hind-marginal border, not forming distinct spots above middle and at anal angle.

Duaringa, Queensland; sent commonly by Mr. G. Barnard.

APHYTOCEROS, n. g.

Forehead flat, vertical. Ocelli present, but concealed with scales. Tongue well developed. Antennæ three-fourths of fore wings, in male stout, filiform, quite simple, naked. Labial palpi moderate, straight, porrected, triangularly scaled, terminal joint concealed. Maxillary palpi short, dilated with loose scales towards apex. Thorax densely hairy beneath between 1st and 3rd pair of legs. Anterior tibiæ with joints dilated with rough scales at apex; posterior tibiæ with outer spurs less than half inner. Abdomen moderately elongate, very stout, in male with scanty anal tuft; valves exserted. Fore wings with veins 6 and 7 from a point, 11 moderately long and oblique. Hind wings as broad as fore wings;

lower angle of cell produced; 3 tolerably near 4, 4 and 5 from a point, 7 out of 6 near origin, anastomosing with 8 to one-third.

Rather a peculiar type, and perhaps of South American affinity.

Aphytoceros lucalis, Walk.

Botys lucalis (*lucusalis*), Walk., 722; *B. histrionalis*, Ld., pl. ix., 13.

Sydney, New South Wales; two specimens taken on lamps in December and January.

GODARA, *Walk.*, *Ld.*

I have not the specimens of this genus to hand, and cannot at present add anything to the characters given by Lederer.

Godara comalis, Gn.

Pionea comalis, Gn., 368.

Duaringa, Queensland; several specimens received from Mr. G. Barnard. Also occurs in India.

BOTYS, *Tr.*

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, ciliated with tufts of cilia (1½) or evenly (⅓—½), sometimes pubescent or rough-scaled above. Labial palpi moderate, straight, porrected, triangularly scaled, terminal joint tolerably concealed. Maxillary palpi moderate or short, filiform. Posterior tibiæ with outer middle-spur one-fourth to one-half, outer end-spur one-half of inner, or all long and equal. Abdomen moderate, in male with slender anal tuft; valves tolerably retracted (in *salentialis* exserted ?). Fore wings with vein 11 moderately long and oblique. Hind wings somewhat broader than fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to near middle.

The genus as thus restricted is probably quite wide enough; it may bear further subdivision on the basis of the differences in the spurs of the posterior tibiæ, as in the two main sections given below.

a. Wings greyish fuscous .. .. *phæopteralis.*
b. ,, ochreous-whitish .. .. *incoloralis.*
c. ,, yellowish.
  1. Hind wings without distinct lines .. .. *salentialis.*

2. Hind wings with distinct lines.
   - i. Second line of fore wings from three-fifths of costa .. .. *æqualis.*
   - ii. Second line of fore wings from near three-fourths of costa .. .. *abruptalis.*

A. Posterior tibiæ with outer spurs not more than half inner.

a. Antennæ of male evenly ciliated ($\frac{1}{3}$—$\frac{1}{2}$).

Botys salentialis, Snell.

Botys salentialis, Snell., Tijd. v. Ent., 1880, 207; ib., 1863, pl. vii., 1.

As noticed by Snellen, the description of Guenée's *Botys furnacalis* comes very near this, but he distinctly states the middle tibiæ of the male to contain a long pencil of hairs, which is not the case in this species; I have not been able to identify Guenée's species, which he gives as Australian.

Sydney, New South Wales; three specimens on lamps in February. Also from Celebes and Java.

Botys incoloralis, Gn.

Botys incoloralis, Gn., 332; *B. melonalis*, Walk., 702; *Spilodes nitetisalis*, ib., 773; *S. dasconalis*, ib., 773 (nec Ld.); *Botys albidalis*, ib., Suppl., 1411; *B. ruficostalis*, Ld., Verh. z. b. G. Wien, 1855, 217, pl. iii., 4.

I have seen a specimen of Lederer's *ruficostalis*, probably authentic, in Zeller's collection; it is certainly this species. Lederer's identification of Walker's *dasconalis* is quite erroneous, according to his figure; I am not aware that this species occurs in North America.

Duaringa, Queensland; two specimens received from Mr. G. Barnard. Also occurs in Celebes, Java, India, and West Africa.

b. Antennæ of male ciliated with tufts of cilia ($1\frac{1}{2}$).

Botys phæopteralis, Gn.

Botys phæopteralis, Gn., 340; *B. otreusalis*, Walk., 637; *B. triarialis*, ib., 639; *B. neloalis*, ib., 643; *B. abstrusalis*, ib., 663; *B. pharaxalis*, ib., 725; *B. immundalis*, ib., Suppl., 1448.

Specimens of this species in Zeller's collection are labelled *phæopteralis*, Gn., and are probably authentic.

Duaringa, Queensland; Sydney, New South Wales, in January; several specimens. Also occurs in Java, Formosa, China, Ceylon, Mauritius, West Africa, and South America.

Botys abruptalis, Walk.

Asopia abruptalis, Walk., 371; *A. dotatalis*, ib., Suppl., 1305; *A. suffectalis*, ib., Suppl., 1307; *Botys jucundalis*, Ld., 463, pl. viii., 17.

Duaringa, Queensland; one specimen sent by Mr. G. Barnard. Also occurs in Ceylon, India, and West Africa.

B. Posterior tibiæ with spurs all nearly equal.

Botys æqualis, Ld.

Botys æqualis, Ld., 468, pl. x., 3.

Duaringa, Queensland; three specimens received from Mr. G. Barnard. Also occurs in India.

ATELOCENTRA, n. g.

Forehead flat, somewhat oblique. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male thick, filiform, evenly ciliated (½), with whorls of scales at joints. Labial palpi long, straight, porrected, elongate-triangularly scaled, terminal joint moderate, lying in scales of second. Maxillary palpi moderate, dilated with loose scales towards apex. Posterior tibiæ with both outer spurs in male rudimentary, almost obsolete. Abdomen moderate, in male with short anal tuft; valves retracted. Fore wings with vein 11 long, very oblique. Hind wings somewhat narrower than fore wings; 3, 4, 5 tolerably approximated at base; 7 out of 6 near origin, anastomosing with 8 to beyond middle.

Distinguished by the obsolescence of both outer spurs in male.

Atelocentra chloraspis, n. s.

♂, 18 mm. Head and antennæ fuscous. Palpi rather dark ochreous-fuscous, white towards base beneath. Thorax ochreous-brown. Abdomen reddish ochreous. Legs snow-white, anterior tibiæ dark grey towards apex. Fore wings short, rather broad, triangular, costa at first straight, towards apex moderately arched, apex rectangular, hind margin slightly oblique, straight, rounded beneath; ochreous-brown, irrorated, especially towards base, with dark reddish fuscous scales, which are metallic-blue in some lights; first line indicated on inner margin at two-fifths; a very large light brassy yellow costal blotch, dark-margined, extending on costa from one-fourth to three-fifths, reaching towards anal angle more than half across wing, margins irregularly rounded, with a small indentation in middle of lower margin, beneath which is a pale yellow dot; within this blotch are two very small round ochreous dark-margined spots towards costa, two small dark fuscous dots towards lower margin, and a few dark scales in middle; an outwards-curved dark fuscous line from costa at five-sixths to close before hind margin below middle, followed by a row of five small light brassy yellow spots, the three lowest mostly suffused with reddish ochreous; costa towards apex paler; hind margin dark reddish fuscous, except a pale interrupted marginal line; cilia grey, with a blackish basal line. Hind wings brownish ochreous, becoming very much paler towards costa and inner margin; a pale brassy yellow central dot, surrounded by dark fuscous scales; an obscure dentate dark fuscous line towards hind margin; cilia as in fore wings, becoming much paler towards anal angle.

A beautiful and conspicuous species, certainly with some perceptible affinity to the European *sambucalis*, S. V. (which, however, has the outer end-spur developed).

Fernshaw, Victoria; one fine specimen in November, taken in swampy forest.

Scopula, *Schrk.*

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male rather stout, filiform, evenly ciliated (¼—⅓), rough-scaled above. Labial palpi rather long, straight, porrected, elongate-triangularly scaled, terminal joint concealed. Maxillary palpi moderate, dilated with loose scales towards apex. Posterior tibiæ with outer middle-spur in male obsolete, in female half inner, outer end-spur one-half to three-fourths of inner. Abdomen moderate, in male with moderate loose anal tuft; valves exserted. Fore wings with vein 11 moderately long, oblique. Hind wings as broad as fore wings; 3 rather remote, 4 and 5 closely approximated towards base, 7 out of 6 near origin, anastomosing with 8 to near middle.

This genus differs from all others of the family represented in Australia in having the outer middle-spur of the male obsolete, whilst all the rest are as usual. In Europe there are very many species thus characterised, and they undoubtedly form a connected group, but are not necessarily to be included in a single genus; on this point I need express no opinion at present. Some at least, however (*prunalis*, Schiff., *olivalis*, S. V., *ferrugalis*, Hb., &c.), agree exactly with the characters given above, and I have therefore redefined the genus *Scopula* as adopted by Guenée to contain them.

Scopula dicealis, Walk.

Scopula dicealis, Walk., 792.

♂, ♀, 20—22 mm. Head, palpi, antennæ, and thorax pale greyish ochreous; palpi suffused with fuscous on sides, beneath white. Abdomen pale greyish ochreous irrorated with fuscous, segmental margins whitish. Legs ochreous-whitish, anterior tibiæ fuscous. Fore wings broadly triangular, costa moderately arched on posterior half, apex rectangular, hind margin obliquely rounded, slightly sinuate beneath apex; pale greyish ochreous, irrorated with rather dark fuscous; lines distinct, dark fuscous; first from before one-fourth of costa to two-fifths of inner margin, obtusely bent in middle; second from three-fourths of costa to before two-thirds of inner margin, obscurely subdentate, moderately curved outwards from a little beneath costa to beneath discal spot, thence straight; discal spots pale, of the ground colour, margined with dark fuscous; first longitudinally oval; second 8-shaped; a row of dark fuscous hind marginal dots; cilia pale greyish ochreous, with two obscure dark fuscous lines. Hind wings pale greyish ochreous, irrorated with dark fuscous, becoming more whitish towards base; discal spot small, dark grey, and a fainter similar one before it; a cloudy dark grey rather irregular curved line at three-fourths; apex sometimes suffused with fuscous; a row of dark fuscous hind marginal dots; cilia ochreous-whitish, with two dark fuscous lines.

Closely allied and very similar to the European *S. prunalis*, Schiff., but paler and more ochreous-tinged.

Larva pale green, feeding on nettle (*Urtica*), in March.

Fish River Caves, New South Wales; common on the limestone hills amongst its food-plant in April.

Mecyna, *Gn.* (nec *Steph.*).

Forehead flat, somewhat oblique. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male filiform, tolerably evenly ciliated ($\frac{2}{3}$). Labial palpi long, straight, porrected, triangularly scaled, terminal joint moderately long, lying in scales of second. Maxillary palpi moderate, dilated with scales towards apex, obliquely truncate. Middle tibiæ in male broadly and flatly dilated, with a groove on inner side, generally containing a large exsertible tuft of woolly hairs; posterior tibiæ with outer spurs half inner. Abdomen moderate, in male with moderate anal tuft; valves exserted. Fore wings with vein 11 moderate, rather oblique. Hind wings somewhat broader than fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-half.

Characterised by the triangularly dilated maxillary palpi, and the grooved middle tibiæ of male. I find it impossible at present to speak accurately about the species of this genus, which vary locally in colour, and require to be distinguished structurally. I cannot assert that there are others.

a. Middle tibiæ of male containing a very large tuft of hairs	*polygonalis.*
b. Middle tibiæ of male without tuft	*deprivalis.*

Mecyna polygonalis, Hb.

Pyralis polygonalis, Hb.; *Mecyna ornithopteralis*, Gn., 411.

The Australian form described by Guenée as *ornithopteralis* only differs from the European in the somewhat broader and more extended dark border of the hind wings. Guenée's figure is exaggerated. I have not been able to examine properly the European form, but believe there is no structural difference. Probably some of the other species described by Guenée are merely local modifications of this also.

Larva in Australia on various *Leguminosæ* (*Templetonia*, &c.), in October and November. The following is a description of the Australian larva, which may be compared with that of other forms:—Elongate, cylindrical, somewhat tapering towards both ends, with very long scattered whitish hairs; yellowish green; a broad fuscous lateral stripe, containing three large irregular nearly confluent black raised spots on each segment, each spot marked with a white dot on upper and lower margins; beneath these an irregular oval ochreous-reddish spot on each segment from 5th to 12th; subspiracular line slender, white, towards segmental divisions yellow, marked with an oblique black bar beneath each spiracle; spots beneath subspiracular large, black; head black, mouth yellowish; 2nd segment black, with slender dorsal and subdorsal white lines; 12th and anal segments black above, with irregular whitish dorsal spots.

Toowoomba and Duaringa, Queensland; Sydney and Blackheath (3500 feet), New South Wales; Fernshaw and Melbourne, Victoria; Hobart, Tasmania; Adelaide, Quorn, and Port Lincoln, South Australia; generally common, from September to December, and in March. Also from Southern Europe.

Mecyna deprivalis, Walk.

Mecyna deprivalis, Walk., 806; *Botys maorialis*, Feld., cxxxiv., 34.

Smaller, darker, and more suffused than the preceding. I have only been able to dissect one male, but could find no trace of the large tuft of hairs so conspicuous in the preceding species.

Auckland, Wanganui, and Christchurch, New Zealand; rather common, in January and March. Also occurs in Ceylon; I believe this form is also found in South Europe.

Larva in New Zealand on *Sophora tetraptera* (*Leguminosæ*); it differs from the preceding, but I have not a complete description.

MYRIOSTEPHES, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, with whorls of rough scales at joints, evenly ciliated ($\frac{1}{5}$). Labial palpi moderately long, straight, porrected, triangularly scaled, terminal joint somewhat pencil-form, partially concealed. Maxillary palpi moderate, dilated with rough scales towards apex. Posterior tibiæ with outer middle-spur in male one-fifth, in female one-half of inner, outer end-spur two-thirds of inner. Abdomen moderate, in male with moderate anal tuft; valves exserted. Fore wings with vein 11 moderately long, oblique. Hind wings as broad as fore wings; 3 moderately remote, 4 and 5 approximated at base; 7 out of 6 near origin, anastomosing with 8 to middle.

Differs from *Botys* especially by the dilated maxillary palpi.

Myriostephes matura, n. s.

♂, ♀, 11—14 mm. Head, palpi, and thorax ochreous-yellow; palpi externally fuscous-tinged, beneath white. Antennæ ochreous, spotted with dark fuscous. Abdomen ochreous-yellow, paler posteriorly. Legs pale grey, anterior tibiæ darker. Fore wings moderate, triangular, costa faintly sinuate in middle, arched towards apex, apex tolerably acute, hind margin sinuate beneath apex, obliquely rounded; ochreous-yellow, often shading into brownish ochreous posteriorly; costal edge dark fuscous from base to beyond middle, thence yellowish white to four-fifths; lines ochreous-fuscous, faintly subdentate; first from one-fourth of costa to one-third of inner margin, slightly curved; second from a small blackish spot at two-thirds of costa to two-thirds of inner margin, gently curved to below middle, then shortly broken inwards; discal spot transversely linear, obscure, ochreous-fuscous; a blackish fuscous hind marginal line; cilia white, with a strong sharply marked blackish line at one-third. Hind wings yellow ochreous, posteriorly suffused with fuscous, in female broadly suffused with rather dark fuscous; a faint discal spot; second line, hind-marginal line, and cilia as in fore wings.

Sydney, New South Wales; common amongst dry scrub, in November, December, and March.

MNESICTENA, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, evenly ciliated (⅓—⅓), or biciliated (1) (*notata*), rough-scaled above. Labial palpi moderate or long, straight, porrected, triangularly scaled, terminal joint somewhat pencil-form, partially concealed. Maxillary palpi moderate, dilated with rough scales towards apex. Posterior tibiæ with outer middle-spurs one-half, outer end-spurs two-thirds of inner. Abdomen moderate, in male with short anal tuft; valves exserted. Fore wings with vein 11 moderately long, oblique. Hind wings as broad as fore wings; 3 moderately remote, 4 and 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to two-fifths. Hind wings with lower median loosely and thinly pectinated towards base.

Distinguished from its nearest allies by the pectination of the lower median of hind wings; this character is, however, much less marked than in the *Crambidæ.* Besides the three New Zealand species (all endemic), I have very little doubt that *Scopula amitina*, Butler (of which *S. cinerea*, Butler, is clearly a mere variety), from Chili, belongs to this genus; I have seen the types, but have not been able to examine their structure; they are, however, closely allied specifically to *Mnesictena marmarina* and *M. flavidalis.*

a. Fore wings with a clear white spot in disc.	
1. Hind wings with a distinct line	*marmarina.*
2. ,, without ,, ...	*notata.*
b. Fore wings without white spots	*flavidalis.*

Mnesictena marmarina, n. s.

♂, ♀, 20—28 mm. Head, palpi, antennæ, and thorax varying from ochreous to grey; palpi externally suffused with dark grey, beneath white. Abdomen varying from yellowish to grey. Legs ochreous-whitish, anterior pair suffused with grey. Fore wings broadly triangular, costa moderately arched on posterior half, apex obtuse, hind margin obliquely rounded; yellowish ochreous, irrorated with grey, sometimes wholly suffused with grey; lines slightly dentate, dark grey; first from one-fifth of costa to one-third of inner margin, obtusely bent in disc; second from four-fifths of costa to three-fourths of inner margin, externally margined with paler, between two-thirds and four-fifths strongly curved inwards to beneath discal spot; a tolerably round white spot in disc above middle, preceded and followed by subquadrate darker grey shades; apical half of costa pale, with four dark grey spots; a row of minute dark grey dots on hind margin; cilia grey, tips ochreous-whitish. Hind wings yellowish, irrorated with grey, sometimes mostly suffused with pale grey; two small round dark fuscous spots placed one obliquely above and before the other in disc; a dark grey line at three-fourths, sinuate inwards beneath costa, and sending a curve inwards beneath discal spot; a grey hind marginal band, obsolete towards anal angle, broader and darker at apex; hind marginal dots and cilia as in fore wings.

Near *M. flavidalis*, but larger and much greyer; always distinguished by the clear white spot in disc.

Palmerston, Christchurch, and Dunedin, New Zealand; several specimens in December, January, and March.

Mnesictena flavidalis, Dbld.

Margaritia flavidalis, Dbld., Dieff. N. Z., ii., 287; *M. quadralis*, ib., 288; *Scopula dipsasalis*, Walk., 796; *Botys otagalis*, Feld., cxxxiv., 35.

Variable in brightness and depth of colouring.

Auckland, Taranaki, Napier, Wellington, Christchurch, and Dunedin, New Zealand; probably generally abundant throughout the North and South Islands, from January to March.

Mnesictena notata, Butl.

Scopula notata, Butl., Cist. Ent., ii., 493.

Arthur's Pass (3000 feet) and Dunedin, New Zealand; a local species; several specimens in January.

NESARCHA, n. g.

Forehead flat, oblique. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male rather stout, filiform, evenly ciliated (¼), rough-scaled above. Labial palpi very long, straight, porrected, 2nd joint with dense evenly projecting scales beneath, terminal joint rather long, exposed, with shorter projecting scales beneath. Maxillary palpi moderate, dilated with loose scales towards apex. Posterior tibiæ with outer middle-spur in male one-sixth, in female one-half, outer end-spur in male one-third, in female one-half of inner. Abdomen elongate, in male with moderate anal tuft; valves exserted. Fore wings with vein 11 moderately long, oblique. Hind wings hardly broader than fore wings; 3 remote, 4 and 5 somewhat approximated at base, 7 out of 6 rather near origin, anastomosing with 8 to one-half.

Of doubtful affinity, but I think there is a relationship with *Mnesictena*; the form of wing is peculiar, but cannot be regarded as generic.

Nesarcha hybreadalis, Walk.

Scopula hybreadalis (*hybreasalis*), Walk., 797; *Scopula paronalis*, ib., 797; *Adena xanthialis*, ib., Cr., 198.

♂, ♀, 24—31 mm. Head and thorax varying from light ochreous to fuscous, white at base beneath. Antennæ ochreous, spotted with dark fuscous above. Abdomen whitish ochreous, towards apex sometimes suffused with fuscous. Legs whitish ochreous, anterior tibiæ fuscous. Fore wings moderately broad, triangular, costa at first slightly, on posterior half strongly arched, apex almost acute, hind margin with upper half excavated, lower half sinuate, so that there is formed a blunt rounded median projection; varying from light yellow ochreous or reddish ochreous to rather dark fuscous, often with these colours irregularly mixed and suffused, sometimes slightly purplish-tinged; lines tolerably distinct, dark fuscous; first from one-fourth of costa to one-third of inner margin, dilated beneath; second from three-fourths of costa to two-thirds of inner margin, tolerably parallel to hind margin, irregularly subdentate; sometimes a small pale ochreous-margined spot before first line beneath costa; a triangular white spot on middle of costa, its apex cut off by a pale ochreous streak, sometimes partially or wholly obsolete; a very small white spot on costa at two-thirds; second line preceded on costal third by three or four partially confluent variable small white spots, sometimes wholly obsolete; cilia greyish ochreous mixed with fuscous, with two dark fuscous lines. Hind wings sinuate below apex; pale yellow ochreous; a grey discal dot, and sometimes a second beyond it; generally a grey line about two-thirds, tolerably parallel to hind margin; sometimes hind margin more or less suffused with dark grey; cilia as in fore wings.

A very variable species, of peculiar appearance.

Auckland, Palmerston, Christchurch, and Dunedin, New Zealand; common in December, January, and March.

METALLARCHA, n. g.

Forehead with an obtuse truncate-conical or elongate flattened projection. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, slender, evenly ciliated ($\frac{1}{2}$—$\frac{3}{4}$). Labial palpi moderate, straight, porrected, 2nd joint with long projecting scales beneath, terminal joint concealed. Maxillary palpi moderate, filiform. Posterior tibiæ with outer middle-spurs one-third to one-half, outer end-spurs one-half of inner. Abdomen elongate, in male with short anal tuft; valves retracted. Fore wings with vein 11 moderate, rather oblique. Hind wings as broad as fore wings; 3, 4, 5 somewhat approximated at base, 7 out of 6 near origin, anastomosing with 8 to before middle.

A genus of beautiful species, distinguished from *Eurycreon* by the retracted valves and filiform maxillary palpi, but otherwise very closely allied.

a. Hind wings with apex yellow .. .. *eurychrysa.*
b. ,, ,, ,, dark fuscous.
  1. Fore wings with large triangular dark-margined orange patch from costa .. .. *calliaspis.*
  2. Fore wings with three orange or yellow blotches.
    α. Central blotch very broad .. .. *achoealis.*
    β. ,, ,, fascia-like.
      i. Central blotch straight .. .. *diplochrysa.*
      ii. ,, ,, bent over posteriorly at apex .. *epichrysa.*

A. Frontal projection long, flattened, terminal edge somewhat excavated.

Metallarcha calliaspis, n. s.

♂, ♀, 17—21 mm. Head, palpi, thorax, and abdomen reddish ochreous-yellow; palpi externally dark fuscous on upper half; shoulders and a central spot of thorax dark fuscous. Antennæ dark fuscous. Legs dark fuscous, tarsal joints yellowish at base, middle and posterior tibiæ yellowish. Fore wings moderate, triangular, costa faintly sinuate, arched towards apex, apex tolerably rounded, hind margin obliquely rounded; light greyish ochreous; a reddish ochreous-yellow spot at base of inner margin; a large blackish triangular blotch, irrorated with whitish grey, extending on costa from about one-third to five-sixths, its apex reaching nearly or quite to inner margin at two-thirds, sometimes truncate; this blotch connected with base by a tolerably broad streak along costa; within the blotch are three irregular orange or reddish spots, placed in a triangle, and occupying nearly the whole of the blotch; a blackish hind-marginal band, suffused anteriorly into ground colour; a few blackish scales along inner margin; cilia dark shining grey, with a basal ochreous-whitish line followed by a blackish line. Hind wings reddish ochreous-yellow; a blackish discal dot, sometimes obsolete; a well-defined broad dark fuscous hind marginal band, attenuated and disappearing before anal angle; cilia as in fore wings.

Variable to some extent, but very distinct.

Petersburg and Port Lincoln, South Australia; tolerably common in October and November, frequenting *Beyeria opaca* (*Euphorbiaceæ*).

B. Frontal projection truncate-conical.

Metallarcha diplochrysa, n. s.

♂, ♀, 16—19 mm. Head, palpi, thorax, and abdomen deep ochreous-yellow; sides of face, upper half of palpi externally, shoulders and a central spot of thorax, dark fuscous; abdomen with 2nd, 3rd, and 7th segments, lateral and posterior margins of intermediate segments, and a spot on 8th, dark fuscous. Antennæ grey. Legs dark fuscous, tarsal joints towards base and posterior tibiæ ochreous-whitish. Fore wings moderate, triangular, costa faintly sinuate, arched posteriorly, apex tolerably rounded, hind margin obliquely rounded, very faintly sinuate below apex; dark fuscous, more or less mixed with greyish ochreous; markings deep ochreous-yellow, sometimes reddish-tinged; a rather large basal blotch, not reaching costa, sometimes suffused with ground colour towards inner margin; a moderately broad rather irregular fascia extending from beneath costa before middle to middle of inner margin, generally truncate above, edged with blackish; a similar fascia from costa at three-fourths, reaching towards anal angle three-fourths across wing, posterior edge sinuate inwards in disc; sometimes a yellow suffusion on costa before apex and on lower part of hind margin: a blackish hind-marginal line; cilia dark glossy grey, with a white basal line, followed by a black line. Hind wings deep ochreous-yellow, sometimes reddish-tinged; a small blackish discal spot; a broad blackish hind-marginal band, contracted in middle, and lower half much narrower; cilia as in fore wings.

Varies in depth and colouring.

Petersburg, Port Lincoln, and coast near Mount Gambier, South Australia; common in October and November, frequenting *Beyeria opaca*.

Metallarcha epichrysa, n. s.

♂, ♀, 14—22 mm. Head, palpi, and thorax bright yellow; upper half of palpi externally, and shoulders dark fuscous. Antennæ yellowish. Abdomen light ochreous-yellow. Legs deep ochreous-yellow, anterior pair suffused with blackish above. Fore wings moderate or rather elongate, triangular, costa faintly sinuate, moderately arched posteriorly, apex tolerably rounded, hind margin oblique, slightly rounded; very pale bluish grey, finely irrorated with black; markings bright yellow; a triangular blotch extending on inner margin from base to two-fifths, upper side near and tolerably parallel to costa; a rather broad direct fascia from middle of inner margin, its upper extremity bent over posteriorly and truncate, not reaching costa; a narrower fascia from three-fourths of costa to near inner margin before anal angle; cilia bright yellow, apical third rather dark shining grey. Hind wings light ochreous-yellow; sometimes a cloudy fuscous discal spot, generally absent; a fuscous hind-marginal band, its inner edge proceeding from two-thirds of costa almost to hind margin in middle, thence rectangularly bent and running to middle of inner margin, lower half of band suffused with ground colour except on inner edge; cilia ochreous-yellow, tips paler.

A very elegant species, variable in size.

Quorn and Petersburg, South Australia; common in October, appearing to frequent *Dodonæa lobulata.*

Metallarcha eurychrysa, n. s.

♂, 22 mm. Head, palpi, antennæ, thorax, abdomen, and legs light ochreous-yellow; palpi somewhat mixed with dark fuscous above; antennæ spotted with dark fuscous; shoulders and a small central spot of thorax dark fuscous; anterior legs suffused with dark fuscous. Fore wings moderate, triangular, costa faintly sinuate, somewhat arched posteriorly, apex tolerably rounded, hind margin obliquely rounded; pale yellow; markings dark fuscous; a rather narrow streak along costa throughout, attenuated to a fine line posteriorly; a somewhat bent narrow fascia at one-third, dilated on costa; a broader fascia from two-thirds of costa to before anal angle, twice slightly sinuate; a rather narrow hind-marginal band, attenuated to a point at anal angle, anterior edge dentate, posterior marked with small triangular ochreous-yellow spots; cilia pale yellow, tips greenish. Hind wings pale ochreous-yellow; a fuscous-grey attenuated streak from costa at three-fourths to hind margin below middle, thence abruptly bent and continued very obscurely and almost obsoletely to middle of inner margin; cilia pale ochreous-yellow.

The hind-marginal band of the hind wings is only visible on its anterior edge.

Ardrossan, South Australia; February and April; a specimen received from the Adelaide Museum, which possesses a second.

Metallarcha achœalis, Walk.

Botys achœalis (*achœusalis*), Walk., 1007.

I have not obtained this species for description. The markings of the fore wings are much as in *M. eurychrysa*, but the pale yellow is replaced by deep orange; the hind wings are deep orange, with a dark fuscous hind-marginal band. Although I have not examined the structure, the species is probably referable here, and is conspicuously distinct.

Several specimens from Eastern Australia in the British Museum.

PROTERŒCA, n. g.

Forehead with a short rounded projection. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, biciliated with tufts of cilia (1½). Labial palpi moderately long, tolerably straight, porrected, 2nd joint with rough projecting scales above and beneath, terminal joint somewhat pencil-form, partially concealed. Maxillary palpi moderate, slender, filiform, apex somewhat pencil-form. Posterior tibiæ with outer middle-spur somewhat more than half, outer end-spur nearly equal to inner. Abdomen elongate, in male with moderate anal tuft; valves exserted. Fore wings with vein 11 moderately long, rather oblique. Hind wings as broad as fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to two-fifths.

Apparently related to *Eurycreon*, but the frontal projection is less developed, the antennæ much more strongly ciliated, the maxillary palpi not terminally expanded.

Proterœca comastis, n. s.

♂, ♀, 11—13 mm. Head, palpi, antennæ, thorax, and abdomen brownish ochreous, more or less irrorated coarsely with blackish; palpi white beneath. Legs ochreous-whitish, anterior and middle tibiæ irrorated with blackish above. Fore wings elongate-triangular, costa sinuate, slightly arched posteriorly, apex round-pointed, hind margin very obliquely rounded; ochreous-whitish, suffused with reddish ochreous except in disc; generally a dense blackish irroration (especially in male) forming a basal patch and broad fasciæ following first and second lines, the last fascia separated from second line on costa by a pale spot; lines blackish, rather thick; first at one-third, slightly curved; second from three-fourths of costa to three-fifths of inner margin, sinuate inwards below middle; an irregular dark fuscous discal spot; cilia ochreous-whitish, base more ochreous, with two dark grey lines, first interrupted. Hind wings ochreous-orange, with some scattered black scales anteriorly; a blackish line beyond middle, sinuate inwards below costa, angulated below middle; a blackish hind-marginal band, very narrow on lower half, gradually dilated on upper half; cilia grey-whitish, basal half blackish.

EURYCREON, *Ld.*

Forehead with an obtuse rounded or conical projection. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male filiform, evenly ciliated (½—¾). Labial palpi moderate, straight, porrected, 2nd joint with long projecting scales beneath, terminal joint concealed. Maxillary palpi moderate or rather long, expanded with loose scales towards apex. Posterior tibiæ with outer spurs one-half to three-fourths of inner. Abdomen elongate, slender, in male with moderately long anal tuft; valves exserted. Fore wings with vein 11 moderately long, oblique. Hind wings as broad as fore wings; 3, 4, 5 somewhat approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-third to two-fifths.

The genus as here restricted is probably well represented in Australia by indigenous species.

a. Hind wings yellow.
  1. Hind wings with a dark fuscous hind-marginal band *beatalis.*
  2. ,, ,, without ,, ,, ,, ,, *ptoalis.*
b. Hind wings not yellow.
  1. Second line of fore wings nearly straight .. .. *massalis.*
  2. ,, ,, ,, not nearly straight.
    α. First line of fore wings obsolete .. .. .. *familiaris.*
    β. ,, ,, ,, tolerably distinct.
      i. Cilia barred with light and dark .. .. *capnochroa.*
      ii. ,, not barred .. .. *xenogama.*

Eurycreon ptoalis, Walk.

Botys ptoalis (*ptousalis*), Walk., 728; *Osiriaca inturbidalis*, ib., Suppl., 1493.

I have not been able to obtain specimens for description, but the species is obviously nearly allied to *E. familiaris*, and probably correctly referable here. It is very similar to *E. familiaris*, but considerably larger and with ochreous-yellow hind wings.

Eastern Australia.

Eurycreon familiaris, n. s.

♂, ♀, 15—16 mm. Head, antennæ, thorax, and abdomen pale brownish ochreous, shoulders darker. Palpi dark fuscous, lower half white. Legs white, anterior pair suffused with dark fuscous above. Fore wings moderate, triangular, costa almost straight, somewhat arched towards apex, apex rounded, hind margin obliquely rounded; light ochreous-brownish, costa somewhat darker; a very small blackish spot on costa at four-fifths; sometimes some scattered dark fuscous scales forming an ill-defined line from this to two-thirds of inner margin, middle third curved outwards, but these are often wholly absent; some obscure dark fuscous hind-marginal dots; cilia whitish, with a blackish line at one-third. Hind wings light ochreous irregularly suffused with grey, with a faint darker line as in fore wings; hind-marginal dots and cilia as in fore wings, dark line of cilia interrupted.

The single Tasmanian specimen is greyer than those from Sydney.

Sydney, New South Wales; Deloraine, Tasmania; several specimens in November, December, and February.

Eurycreon xenogama, n. s.

♂, 18—19 mm. Head, antennæ, thorax, and abdomen ochreous-whitish, suffused with light fuscous. Palpi externally dark fuscous, lower half white. Legs whitish, anterior pair and middle tarsi suffused with dark fuscous except at apex of joints. Fore wings elongate-triangular, narrow at base, costa sinuate, posteriorly moderately arched, apex rounded, hind margin obliquely rounded; ochreous-whitish irrorated with fuscous, so as to appear pale fuscous; lines slender, ill-defined, dark fuscous, rather irregular; first from one-fifth of costa to one-fourth of inner margin, slightly curved; second from three-fourths of costa to two-thirds of inner margin, rather indented in middle, abruptly bent back from above anal angle to beneath discal spot; a round slightly paler spot in disc before middle, fuscous-margined, and a subquadrate similar discal spot, space between them paler; a row of cloudy dark fuscous dots on hind margin; cilia ochreous-whitish, with an interrupted dark grey line at one-third, and a cloudy grey line at two-thirds. Hind wings ochreous-whitish, fuscous-tinged, faintly suffused with darker towards apex and on a blotch below middle of hind margin; a cloudy dark grey sinuate line beyond middle, in disc abruptly curved outwards into a narrow sinuous loop; a small cloudy grey discal spot; hind-marginal dots and cilia as in fore wings.

♀, 13—14 mm. Head and thorax darker fuscous than in male. Fore wings ochreous-fuscous mixed with dark fuscous; lines and discal spots as in male, but blackish fuscous, much stronger; first line preceded and second line followed by an irregular white margin, discal spots surrounded with white; cilia darker. Hind wings white, towards base of inner margin fuscous-tinged; discal spot and line as in male, but much stronger and blackish; a large blackish apical blotch, and another smaller one on hind margin above anal angle, touching loop of discal line; cilia white, with a blackish basal line, and faint grey posterior line.

The sexes are at first sight very different, the female being considerably smaller, and the markings very much more sharply contrasted; the markings are, however, exactly the same in form.

Adelaide, South Australia; four specimens (two males, two females) in October.

Eurycreon capnochroa, n. s.

♂, ♀, 12—16 mm. Head, palpi, thorax, and abdomen whitish ochreous, mixed with fuscous and dark fuscous; lower half of palpi white. Antennæ white, annulated with dark fuscous. Legs dark fuscous, apex of joints white. Fore wings moderate, triangular, narrow at base, costa slightly sinuate, gently arched posteriorly, apex tolerably rounded, hind margin oblique, waved, faintly sinuate, rather bowed in middle; pale whitish fuscous, densely irrorated with rather dark fuscous; lines dark fuscous, tolerably distinct; first at one-fifth, rather bent in middle; second from two-thirds of costa to rather beyond middle of inner margin, slightly indented at one-third, sharply angulated inwards at two-thirds to beneath discal spot, sometimes followed by a faint pale suffusion; a dark fuscous dot midway between base and discal spot; discal spot linear-crescentic, ochreous-whitish; hind margin spotted with dark fuscous; cilia white, with two broad dark fuscous lines, obscurely barred, costal cilia marked with three or four quadrate dark fuscous spots. Hind wings with ground colour as in fore wings; first line obsolete, second as in fore wings; a small dark fuscous discal spot; cilia as in fore wings.

The sexes are exactly similar.

Murrurundi, Sydney, and Blackheath (3500 feet), New South Wales; Launceston, Tasmania; Port Lincoln, South Australia; common from November to April.

Eurycreon beatalis, Feld.

Botys beatalis, Feld., cxxxv., 5.

Peak Downs, Queensland; Sydney, New South Wales; two specimens in March.

Eurycreon massalis, Walk.

Scopula massalis, Walk., 792; *Dosara cœlatalis*, ib., 829.

♂, ♀, 15—17 mm. Head, palpi, and thorax pale ochreous, in female suffused with reddish ochreous; palpi white at base beneath. Antennæ grey-whitish. Abdomen pale ochreous. Legs ochreous-whitish, anterior pair suffused with dark fuscous. Fore wings moderate, triangular, costa sinuate, moderately arched posteriorly, apex rounded, hind margin obliquely rounded; pale ochreous, in female suffused with reddish ochreous; costal edge dark fuscous; some dark fuscous scales towards base of inner margin; first line obsolete, represented by a blackish mark on submedian fold before middle, tending to be connected with second line along fold; a small round spot in disc before middle, and a similar discal spot, reddish ochreous, sometimes obsolete; sometimes a pale line along lower median vein in disc; second line reddish ochreous suffused with blackish, especially towards costa, running from costa before apex to three-fourths of inner margin, almost straight, slightly indented inwards in middle, sometimes margined posteriorly by a pale streak; a waved dark fuscous hind-marginal line; cilia light shining grey, with a darker line near base. Hind wings whitish ochreous, hind margin broadly suffused with darker fuscous; cilia as in fore wings.

Not closely allied to the indigenous species, from all of which it differs by the regular conical frontal projection.

Duaringa, Queensland; Murrurundi, New South Wales, in November; several specimens. Also occurs in Ceylon and West Africa.

CRIOPHTHONA, n. g.

Forehead with a long truncate conical projection. Ocelli present. Tongue well developed. Antennæ three-fourths of fore wings, in male rather stout, filiform, evenly ciliated ($\frac{1}{2}$), sometimes rough-scaled above (*haliaphra*). Labial palpi moderately long, straight, porrected, with rough projecting scales, somewhat truncate at apex, terminal joint concealed. Maxillary palpi moderate, filiform, with loose scales towards apex. Posterior tibiæ with outer spurs one-half to two-thirds of inner. Abdomen elongate, in male with moderate anal tuft; valves retracted (?). Fore wings with vein 11 moderately long, oblique. Hind wings as broad as fore wings; 3 remote, 4 and 5 tolerably remote or from a point (*haliaphra*), 7 out of 6 near origin, anastomosing with 8 to middle.

The two species included here do not exactly agree, but both differ from *Eurycreon* and agree with *Scdenia* in the very long frontal projection.

a. Fore wings white .. .. *haliaphra*.
b. ,, ,, grey .. .. *finitima*.

Criophthona finitima, n. s.

♂, 15 mm. Head, thorax, and abdomen pale greyish ochreous, irrorated with dark grey. Antennæ greyish. Palpi dark fuscous, beneath white towards base. Legs white, anterior pair dark fuscous. Fore wings elongate-triangular, narrow, costa slightly sinuate, moderately arched posteriorly, apex rounded, hind margin very obliquely rounded; light grey, finely irrorated with black, towards costa broadly suffused with darker grey; lines broad, cloudy, dark grey, slightly sinuate; first from one-fourth of costa to two-fifths of inner margin, second from five-sixths of costa to four-fifths of inner margin; a small cloudy whitish spot on costa before second line; discal spot small, round, cloudy whitish, dark-margined; an interrupted dark grey hind-marginal line; cilia whitish grey, with an interrupted dark grey line. Hind wings grey, somewhat lighter towards base; cilia grey-whitish.

An inconspicuous species, in form resembling *Sedenia*.

Quorn, South Australia; one specimen in October.

Criophthona haliaphra, n. s.

♂, 13 mm. Head whitish mixed with fuscous. Palpi dark fuscous, beneath white at base. Antennæ whitish, spotted with fuscous. Thorax and abdomen whitish irrorated with dark fuscous. Legs dark fuscous, posterior tibiæ and apex of all joints white, anterior tibiæ with a white band. Fore wings elongate-triangular, costa sinuate, posteriorly arched, apex rounded, hind margin very obliquely rounded; white, with scattered dark fuscous scales; markings ochreous-fuscous irrorated with dark fuscous; an ill-defined basal patch, separated from first line by a narrow space; first line broad, posteriorly suffused, from one-third of costa to two-fifths of inner margin, rather curved; second from five-sixths of costa to four-fifths of inner margin, moderately curved outwards between middle and three-fourths, anteriorly margined by a moderately broad dark fascia, of which the anterior edge is straight; a small round spot in disc, suffused into first line; an indistinct somewhat 8-shaped discal spot, white, margined with dark fuscous; an irregular hind-marginal fascia, separated by a narrow space from second line; cilia with basal third white, bounded by an interrupted black line, remainder grey. Hind wings fuscous-grey, paler towards base; a very ill-defined pale line at three-fourths, anteriorly darker-margined, angulated outwards below middle; cilia whitish, with a dark fuscous line at one-third, and a lighter posterior line.

Sydney, New South Wales; one specimen.

SEDENIA, *Gn.*

Forehead with a long terminally excavated or truncate conical projection. Ocelli present. Tongue absent. Antennæ three-fourths of fore wings, in male tolerably filiform, evenly ciliated ($\frac{1}{2}$—$\frac{3}{4}$), rough-scaled above. Labial palpi rather long, straight, porrected, with rough projecting scales, attenuated and somewhat drooping towards apex. Maxillary palpi moderate, with loose projecting scales towards apex. Posterior tibiæ with outer spurs two-thirds of inner. Abdomen elongate, in male with a moderate anal tuft, sometimes with an obliquely erect rounded process on apex of abdomen (*rupalis*); valves exserted. Fore wings with vein 11 moderately long, rather oblique. Hind wings as broad as fore wings; 3, 4, 5 remote; 7 out of 6 near origin, anastomosing with 8 to middle.

Characterised specially by the absence of the tongue, which appears to me wholly obsolete; though neither Guenée nor Lederer notice this character.

a.	Fore wings white	*rupalis.*
b.	,, ,, whitish ochreous	*cervalis.*

Sedenia rupalis, Gn.

Sedenia rupalis, Gn., 250.

Murrurundi and Bowenfels (2500 feet), New South Wales; Melbourne, Victoria; Quorn, Port Lincoln, and Kangaroo Island, South Australia; rather common, in October, November, and January.

Sedenia cervalis, Gn.

Sedenia cervalis, Gn., 250, pl. iii., 3; Ld., pl. viii., 4; *Scopula itonusalis*, Walk., 794; *S. pictoalis*, ib., 1016.

Sydney, New South Wales; Hobart, Tasmania; Mount Lofty range and Wirrabara, South Australia; common, in October, December, and March.

TRITÆA, n. g.

Forehead with a conical projection. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male slender, filiform, evenly ciliated ($\frac{1}{2}$). Labial palpi moderate, straight, porrected, with dense rough projecting scales beneath, rather longer towards apex, terminal joint concealed. Maxillary palpi moderately long, somewhat expanded terminally. Posterior tibiæ with outer spurs less than half inner. Abdomen stout, in male with short truncate tuft; valves retracted. Fore wings with vein 11 moderately long, oblique. Hind wings broader by one-half than fore wings; 3 closely approximated to 4 at base, 4 and 5 in male stalked, in female closely approximated towards base, 7 out of 6 near origin, anastomosing with 8 to middle.

I have only seen one poor male, and am not sure of the characters of that sex, but the genus is sufficiently distinguished from its allies by the breadth of the hind wings, which are half as broad again as the fore wings. The genus is truly intermediate between *Eurycreon* and *Scoparia*, and certainly approximates to the ancestral form of *Botydidæ*.

Tritæa ustalis, Walk.

Scopula ustalis, Walk., Suppl., 1477; *S. turbidalis*, ib., Suppl., 1477; *Botys affinitalis*, Ld., 475, pl. xii., 4.

Lederer's figure is exceedingly poor, the fore wings being much too broad.

Duaringa, Queensland; Sydney and Blackheath (3500 feet), New South Wales; Adelaide, Wirrabara, and Ardrossan, South Australia; rather common, in October and March.

SCOPARIADÆ.

Fore wings with veins 8 and 9 stalked, 7 separate, 10 separate. Hind wings with vein 6 from upper angle of cell, 7 stalked with 6, anastomosing with 8 (or very rarely free); 4 and 5 generally from a point or stalked; lower median naked, or sometimes with well-defined pectination. Abdomen in male with valves usually exserted; claspers not developed; uncus generally developed. Maxillary palpi broadly triangularly dilated, porrected, not resting on labial palpi.

I am not yet confident of the limits of this family, but believe it can be constantly distinguished from the *Botydidæ* by the characters as given, especially by the development of the uncus. Should the latter character not prove invariable, the form and position of the maxillary palpi, and the structure of veins 4 and 5 of the hind wings, are additional points. Similarly a majority of characters must be used to separate the family from the *Crambidæ*, since the pectination of the lower median vein of hind wings is as well developed in *Nyctarcha* as in any Crambid.

a. Lower median vein of hind wings distinctly pectinated.
  1. Vein 1 *b* of hind wings with strong distinct pectination .. .. *Nyctarcha.*
  2. Vein 1 *b* of hind wings not pectinated .. .. *Eclipsiodes.*
b. Lower median vein of hind wings not pectinated.
  1. Discal area of hind wings above lower median with long hairs.
    α. Terminal joint of palpi long, with long dense loose hairs .. .. *Tetraprosopus.*
    β. Terminal joint of palpi moderate, with appressed scales .. .. *Xeroscopa.*
  2. Discal area of hind wings without long hairs .. *Scoparia.*

ECLIPSIODES, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male rather stout, filiform, evenly ciliated ($\frac{1}{3}$), above pubescent and rough-scaled. Labial palpi moderate, straight, porrected, 2nd joint with dense rough projecting scales beneath, longer towards apex, terminal joint moderate, exposed, cylindrical, loosely scaled, tolerably pointed. Maxillary palpi long, as long as 2nd joint of labial palpi, towards apex triangularly dilated, obliquely truncate. Posterior tibiæ with outer spurs rather more than half inner. Abdomen moderate, in male with moderate anal tuft; valves exserted, uncus rather long, bent downwards. Fore wings with vein 10 moderately near 9, oblique; 11 widely remote from 10, in middle bent towards 12, very short, not passing cell. Hind wings one-fourth broader than fore wings; 3 from near angle, 4 and 5 from point of angle, 7 from a point with 6, anastomosing with 8 to beyond one-third. Fore wings with small tufts of raised scales on surface. Hind wings with lower median loosely but tolerably distinctly pectinated towards base, 1 *b* not pectinated.

Eclipsiodes crypsixantha, n. s.

♂, ♀, 15—17 mm. Head, palpi, antennæ, thorax, and abdomen dark fuscous; palpi white at base beneath; margins of abdominal segments yellowish. Legs black, apex of joints and median ring of anterior and middle tibiæ white. Fore wings moderate, triangular, costa slightly arched, apex rounded, hind margin obliquely rounded; dull dark fuscous, sometimes with a few grey-whitish scales; lines black, formed of spots of raised scales; first from one-fourth of costa to one-third of inner margin, somewhat curved; second from three-fourths of costa to two-thirds of inner margin, rectangularly bent in middle and curved inwards to beneath discal spot; discal spot transverse, raised, black; a row of blackish dots before hind margin, sometimes followed by a row of grey-whitish submarginal lunules; cilia dark grey, with a dark fuscous basal line. Hind wings clear ochreous-yellow; a well-defined moderately broad dark fuscous hind-marginal band, rather dilated towards inner angle, continued narrowly along costa; cilia grey, with a dark fuscous basal line.

Sydney, New South Wales; Port Lincoln, South Australia; in September, November, February, and March, common but local.

NYCTARCHA, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ less than two-thirds of fore wings, in male stout, filiform, evenly ciliated ($\frac{1}{4}$—$\frac{1}{3}$), above pubescent (*atra*) or rough-scaled (*ophideres*). Labial palpi moderate, straight, porrected, 2nd joint with dense projecting scales beneath, longer towards apex, terminal joint exposed, thick, somewhat expanded with scales towards apex and obliquely truncate. Maxillary palpi long, not much shorter than labial, expanded with scales towards apex, truncate. Posterior tibiæ with outer spurs half inner; legs short. Abdomen rather stout, in male with moderate anal tuft; valves retracted, uncus moderately long. Fore wings with vein 11 moderate, rather oblique. Hind wings rather broader than fore wings; 3, 4, 5 approximated at base, 7 out of 6 near origin, anastomosing with 8 to one-fifth to one-third. Hind wings with lower median and 1 *b* each strongly pectinated towards base.

A peculiar and interesting genus, probably of an early type.

a. Hind wings dark fuscous .. .. *atra.*
b. ,, ,, orange.
  1. Fore wings with a pale spot on costa .. .. *ophideres.*
  2. ,, ,, with six scattered pale spots .. *persumptana.*

Nyctarcha persumptana, Walk.

Orosana persumptana, Walk., Tort., 459.

♀, 16 mm. Head black, spotted with ochreous-orange on forehead and crown. Labial palpi black, towards base yellow-ochreous; maxillary palpi black, apex pale ochreous. Antennæ black. Thorax black, with two anterior dots and a posterior spot ochreous-orange.

Abdomen black, segmental margins ochreous-orange. Legs black, middle and posterior tibiæ broadly banded with ochreous-yellow, apex of all joints whitish ochreous. Fore wings rather short, triangular, costa hardly arched, apex rounded, hind margin rather obliquely rounded; black, with six light yellow ochreous spots; first on inner margin at one-fourth, erect, transverse, reaching more than half across wing; second quadrate, in disc before middle; third small, transverse, on inner margin beyond middle; fourth on costa before two-thirds, transverse, direct, reaching half across wing; fifth minute, on costa close beyond fourth; sixth subquadrate, above anal angle; cilia dark purplish fuscous, terminal half whitish ochreous round apex and on a spot at anal angle. Hind wings bright orange; a very small round black discal spot; a broad blackish hind-marginal band, inner edge somewhat excavated above middle, narrowly continued along costa; cilia as in fore wings.

A strikingly handsome species.

Sydney, New South Wales; one specimen in October.

Nyctarcha ophideres, Walk.

Orosana ophideres (*ophideresana*), Walk., Tort., 459.

♂, ♀, 11—13 mm. Head, palpi, antennæ, thorax, abdomen, and legs dark fuscous; a white line round eyes; apex of joints of maxillary palpi and lower half of labial palpi white; abdominal segments margined with orange-ochreous; tibiæ banded with ochreous-whitish, apex of all joints ochreous-white. Fore wings moderate, triangular, costa almost straight, apex rounded, hind margin obliquely rounded; dark fuscous, with scattered silvery-blue metallic scales; lines darker, almost obsolete; first from one-fourth of costa to one-third of inner margin, somewhat curved: second from two-thirds of costa to beyond middle of inner margin, subdentate, rectangularly bent in middle and curved inwards to beneath the obsoletely darker discal spot; a transverse subtriangular ochreous-whitish spot on costa immediately before second line, reaching nearly half across wing; sometimes some ochreous-whitish dots on hind margin; cilia dark grey, with a blackish line at one-third, terminal portion with a broad whitish patch at apex and sometimes a spot at anal angle. Hind wings bright orange; a moderately large black discal spot, confluent with costal border; a broad blackish hind-marginal band, projecting triangularly inwards above anal angle, and continued narrowly along costa; cilia as in fore wings.

Sydney, New South Wales; several specimens in January and March, frequenting swampy scrub, and flying in the sunshine. Also occurs in India and Madagascar, without variation.

Nyctarcha atra, Butl.

Orosana atra, Butl.

Castle Hill and Lake Wakatipu, New Zealand; not uncommon in December and January, flying on dry grassy mountain slopes, at 2000—3000 feet, hard to see.

SCOPARIA, *Hw.*

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male filiform, evenly ciliated (about $\frac{1}{2}$). Labial palpi moderate or long, tolerably straight, porrected, 2nd joint beneath with long dense projecting scales, longer towards apex, terminal joint moderate. Maxillary palpi rather long, strongly dilated with scales towards apex, obliquely truncate. Posterior tibiæ with outer spurs about half inner. Abdomen moderate, in male with moderate anal tuft; valves exserted, uncus short. Fore wings with vein 11 rather short, tolerably oblique. Hind wings from one-third broader to twice as broad as fore wings; 3 remote from 4, 4 and 5 from a point or stalked, 7 out of 6 near origin, anastomosing with 8 to one-third to one-half. Hind wings with discal area above lower median without hairs.

I have not made a complete examination of the species which I possess of this and the two following genera, which are very numerous; and the characters given above may require some modification. I do not propose now to describe any of these species, as they will all be fully described in a paper shortly to appear in the 'Proceedings' of the New Zealand Institute; I give, however, a list of those described already by other authors, and identified by me as belonging here. I have altogether about sixty species of *Scoparia*, by far the larger number being from New Zealand; none are common to Australia and New Zealand.

Scoparia exhibitalis, Walk.

Scoparia exhibitalis, Walk., 1500.

Sydney, New South Wales; from August to October, common.

Scoparia minusculalis, Walk.

Scoparia minusculalis, Walk.

Larva in moss on tree-trunks, in January.

Bealey River, Akaroa, and Dunedin, New Zealand; tolerably common in forest, in January and February.

Scoparia minualis, Walk.

Scoparia minualis, Walk.

Christchurch and Otira George, New Zealand; common in forest, in January.

Scoparia ustimacula, Feld.

Scoparia ustimacula, Feld., cxxxv.. 17; *S. conifera*, Butl., Cist. Ent., ii., 493.

Castle Hill, New Zealand; taken by Mr. J. D. Enys.

Scoparia pongalis, Feld.

Scoparia pongalis, Feld., cxxxvii., 33.

Makatoku and Dunedin, New Zealand; several specimens in forest in March.

Scoparia diphtheralis, Walk.

Scoparia diphtheralis, Walk., 1501.

Hamilton, Napier, Wellington, Christchurch, and Otira George, New Zealand; common at light, from December to March.

Scoparia submarginalis, Walk.

Hypochalcia submarginalis, Walk., Cr., 48; *Nephopteryx maoriella*, ib., Suppl., 1720.

Generally abundant in New Zealand, from Cambridge to Lake Wakatipu; from November to March, on fences, rocks, &c.; very variable.

Scoparia indistinctalis, Walk.

Hypochalcia indistinctalis, Walk., Cr., 48; *Scoparia rakaiensis*, Knaggs, E. M. M., iv., 80.

Wellington and Lake Wakatipu, New Zealand; common, from December to February.

Scoparia cleodoralis, Walk.

Scopula cleodoralis, Walk., 793.

Sydney and Blackheath (3500 feet), New South Wales; Mount Macedon, Victoria; Mount Wellington and Deloraine, Tasmania; common from November to February.

Scoparia Feredayi, Knaggs.

Scoparia Feredayi, Knaggs, E. M. M., iv., 80; *S. moanalis*, Feld., cxxxvii., 34.

Eketahuna, Wellington, Bealey River, and Lake Wakatipu, New Zealand; not uncommon, from January to March.

Scoparia exilis, Knaggs.

Scoparia exilis, Knaggs, E. M. M., iv., 81.

Christchurch and Lake Wakatipu, New Zealand; not uncommon on dry grassy hills, in October, December, and April.

Scoparia sabulosella, Walk.

Crambus sabulosellus, Walk., Cr., 178.

Generally common in New Zealand, from Hamilton to Invercargill, in dry grassy places, in December and January. Butler has identified with this species a specimen from Chili; I have seen this, which is certainly very similar, but I cannot positively assert that it is identical.

Scoparia trivirgata, Feld.

Crambus trivirgatus, Feld., cxxxvii., 29.

Christchurch and Lake Wakatipu, New Zealand; tolerably common on dry grassy hills, in December, February, and March.

TETRAPROSOPUS, *Butl.*

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male with joints angularly projecting, pubescent. Labial palpi rather long, straight, porrected, 2nd joint with long dense projecting scales beneath, forming a long oblique apical tuft, terminal joint rather long, with dense rather long loosely appressed scales. Maxillary palpi long, strongly dilated with scales towards apex, obliquely truncate. Posterior tibiæ with outer spurs one-third of inner. Abdomen moderate, in male with short anal tuft; valves exserted, uncus moderate, slightly curved. Fore wings with vein 11 rather short, very little exceeding cell. Hind wings two and a half times as broad as fore wings; 3 rather remote, 4 and 5 from a point, 7 out of 6 near origin, anastomosing shortly with 8 to one-third. Hind wings with discal area above lower median furnished with numerous long hairs.

Tetraprosopus Meyrickii, Butl.

Tetraprosopus Meyrickii, Butl., Ann. Mag. N. H., (5), ix., 1882, 97.

Since placed by Butler in the British Museum collection under *Nephopteryx favilliferella*, Walk., which is a quite different species, belonging probably to *Xeroscopa*.

Blackheath (3500 feet), New South Wales; Mount Macedon, Victoria; Mount Gambier, South Australia; locally abundant in November and December on the trunks of fibrous-barked *Eucalypti*; varies a good deal.

I take this opportunity of protesting (without offence to Mr. Butler's complimentary intentions) against the general use of specific names such as the above.

XEROSCOPA, n. g.

Forehead flat, vertical. Ocelli present. Tongue well developed. Antennæ two-thirds of fore wings, in male filiform, evenly ciliated (about $\frac{1}{2}$). Labial palpi rather long, or long, straight, porrected, 2nd joint with dense projecting scales beneath, longer in front, terminal joint moderate, partly exposed. Maxillary palpi moderate, strongly dilated with scales towards apex, obliquely truncate. Posterior tibiæ with outer spurs about half inner. Abdomen moderate, in male with moderate anal tuft; valves exserted, uncus moderate. Fore wings with vein 11 moderate, rather oblique. Hind wings from one and a half times to more than twice as broad as fore wings; 3 remote, 4 and 5 short-stalked, 7 out of 6 near origin, anastomosing with 8 to one-third. Hind wings with discal area above lower median more or less furnished with long fine hairs.

Besides the two following species, I have about fifteen others, almost all from New Zealand.

Xeroscopa ejuncida, Knaggs.

Scoparia ejuncida, Knaggs, E. M. M., iv., 81.

Bealey River, Mount Hutt, and Lake Wakatipu, New Zealand, at an elevation of 2500—4000 feet; common, in January and March.

Xeroscopa rotuella, Feld.

Crambus rotuellus, Feld., cxxxvii., 30.

Mount Hutt; taken commonly by Mr. R. W. Fereday, in January.

Note.

Ennychia melissalis, Walk., is a specimen of the European *Threnodes pollinalis*, S. V.; there is no reason to believe that this species could occur in Australia, and I have no doubt there is an error of locality.

Scoparia objurgalis, Gn., and *S. australialis*, Gn., I have not yet been able to identify satisfactorily.